EDUCATIONAL SCREEN

...L LIBRARY
... OF MICH.

THE MAGAZINE DEVOTED TO AUDIO-VISUAL AIDS IN EDUCATION

JAN 17 1941

25¢ A COPY $2.00 PER YEAR

JANUARY, 1941

NEW KEYSTONE UNITS
in
AMERICAN HISTORY
Frontiers of America - Four Units

105 Sec. Soc. Studies Units — Frontiers — Atlantic — A Settler's Cabin, Bald Mountain, N. C.
KEYSTONE VIEW COMPANY
STUDIOS, MEADVILLE, PA.

•The Atlantic Frontier

132 Sec. Soc. Studies Units — Frontiers — W. of Alleghenies — Flatboats Moving down the Ohio
KEYSTONE VIEW COMPANY
STUDIOS, MEADVILLE, PA.

The Frontier beyond the Alleghenies

154 Sec. Soc. Studies Units — Frontiers — W. of Mississippi — Emigrants Going Westward
KEYSTONE VIEW COMPANY
STUDIOS, MEADVILLE, PA.

The Frontier beyond the Mississippi

The Frontier beyond the Rockies

Also Ready— American Textiles—Four Units
Democracy Arms—Two Units

Twenty-five Lantern Slides in Each Unit - Eight in Color

Pictorial Material Organized and Teachers' Manuals
Prepared under the Direction of Dr. Earl W. Hildreth

Complete Title Lists Furnished upon Request

Keystone View Company

MEADVILLE, PENNA.

The EDUCATIONAL SCREEN

THE EDUCATIONAL SCREEN
Staff

NELSON L. GREENE - - - *Editor-in-Chief*
EVELYN J. BAKER - *Advertising Manager*
JOSEPHINE HOFFMAN - *Office Manager*

Department Editors

WILBER EMMERT - - - - Indiana Pa.
HARDY R. FINCH - - Greenwich, Conn.
ANN GALE - - - - - - - Chicago, Ill.
JAMES D. FINN - - - - Greeley, Colo.
JOSEPHINE HOFFMAN - - - Chicago, Ill.
F. DEAN MCCLUSKY - Scarborough, N. Y.
ETTA SCHNEIDER - - New York, N. Y.
DON WHITE - - - - - Atlanta, Ga.

Editorial Advisory Board

WARD C. BOWEN, Chief, Bureau of Radio and Visual Aids, State Education Department, Albany, N. Y.

MARIAN EVANS, Director, Visual Instruction Center, Public Schools, San Diego, Calif.

W. M. GREGORY, Director, Educational Museum, Public Schools, Cleveland, Ohio.

J. E. HANSEN, Chief, Bureau of Visual Instruction, Extension Division, University of Wisconsin, Madison, Wis.

J. A. HOLLINGER, Director, Department of Science and Visualization, Public Schools, Pittsburgh, Pa.

BOYD B. RAKESTRAW, Assistant Director, Extension Division, University of California, Berkeley, Calif.

PAUL C. REED, Director, Department of Radio and Visual Education, Board of Education, Rochester, N. Y.

W. GAYLE STARNES, in charge of Audio-Visual Aids, Department of University Extension, University of Kentucky, Lexington, Ky.

LELIA TROLINGER, Secretary, Bureau of Visual Instruction, Extension Division, University of Colorado, Boulder, Colo.

W. W. WHITTINGHILL, Director, Department of Visual and Radio Education, Board of Education, Detroit, Mich.

VOL. XX JANUARY, 1941 NUMBER ONE
WHOLE NUMBER 188

Contents

Cover Picture— Skiing in the North Woods of Wisconsin and Upper Michigan (Courtesy Chicago & Northwestern Railroad)

The Nation, Our Campus ..... Alvin B. Roberts 5

Minnesota's Growing Visual Education Service ..... Paul Veblen 9

How to Choose a Still Camera ..... M. Richard Dickter 11

An Assembly Project Developed by School Photographic Clubs ..... W. Edgar Glenn and James L. Gordon 13

Motion Pictures—Not for Theatres ..... Arthur Edwin Krows 15

In and For the Classroom ..... Conducted by Wilber Emmert 18

The Literature in Visual Instruction— A Monthly Digest ..... Conducted by Etta Schneider 20

Among Ourselves—Notes from and by The Department of Visual Instruction ..... Conducted by James D. Finn 21

School-Made Motion Pictures ..... Conducted by Hardy R. Finch 26

New Films of the Month ..... Conducted by Don White 32

News and Notes ..... Conducted by Josephine Hoffman 34

Current Film News 38

Among the Producers 42

Here They Are! A Trade Directory of the Visual Field 44

SUBSCRIPTION PRICE

Domestic	$2.00
Canada	$2.25
Foreign	$3.00
Single Copies	.25

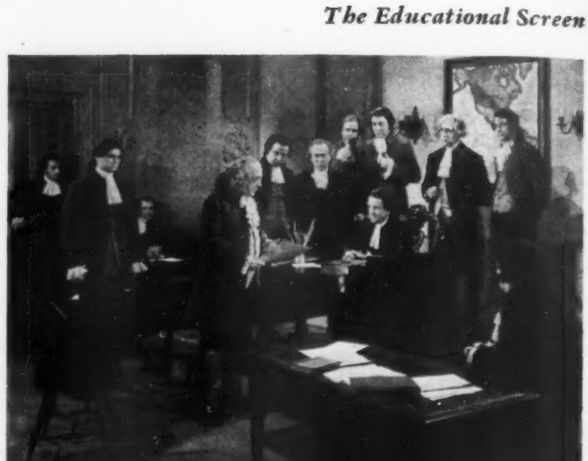
The EDUCATIONAL SCREEN published monthly except July and August by The Educational Screen, Inc. Publication Office, Pontiac, Illinois; Executive Office, 64 East Lake St., Chicago, Illinois. Entered at the Post Office at Pontiac, Illinois, as Second Class Matter.

Address communications to The Educational Screen, 64 East Lake St., Chicago, Ill.

OUR GIGANTIC FALL CATALOG

of 16 mm Sound and Silent Motion Pictures listed the largest number of these subjects ever gathered under one roof.

But this is not all! **Bulletins No. 1, No. 2, No. 3 and No. 4 are now ready listing hundreds of additional subjects. Among them are the following, outstanding for school use:**



From the film "Our Monroe Doctrine"

FEATURES

Adventures of Chico	6 reels
Daniel Boone	8 reels
Tell Tale Heart (Edgar Allen Poe)	5 reels
The Challenge (Conquest of the Matterhorn)	8 reels
Our Daily Bread	8 reels
Auld Lang Syne (Life of Robert Burns)	7 reels
Boys Reformatory	6 reels
Katherine the Great	10 reels
Elephant Boy	9 reels
Henry the Eighth	10 reels
Rembrandt	9 reels
Scarlet Pimpernel	11 reels
Things to Come	10 reels

Also:

Gentleman from Arizona, the first complete 16 mm feature in natural color 8 reels

TWO-REEL SUBJECTS

Our Monroe Doctrine

Our Declaration of Independence

Our Bill of Rights

The Cause and Immediate Effects of the First World War

ONE-REEL SUBJECTS

(Geography)

Empire of the Sun
Denmark
Modern Manilla
People of Luzon
Beautiful Baguio
Filipino Farmers
Among the Hardwoods
Golden Fleece
Bushland Revels
What About Sweden Now
Scotland
Florida
California
South America
Come Back to Ireland
Havana
Virginia City

(Animal Life)

Animal Cunning
Seeing Eye
Return of the Buffalo
How to Train Dogs
Dog Days
Not so Dumb
Clever Critters
Charms

(Bird Life)

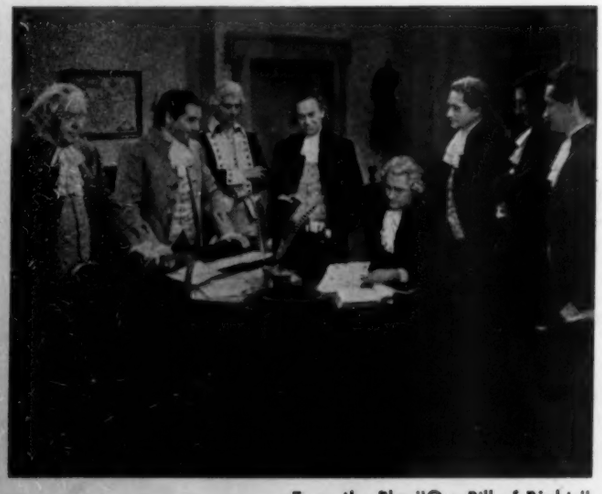
Song Birds of the Northwoods
Grey Owl's Little Brother
Private Life of the Gannets
Born to Die
Nature's Songbirds
We Live in Two Worlds

(Insect Life)

City of Wax
Large White or Cabbage Butterfly

(Miscellaneous)

How We Hear
Geometry Brought to Life
Log Rolling



From the film "Our Bill of Rights"

NEW FOREIGN LANGUAGE SUBJECTS

The Life of Guiseppe Verdi (Italian) 10 reels
The Great Light (Italian) 10 reels
The Cantor's Son (Yiddish) 10 reels
Silvery Salmon (French) 1 reel
Let's Go Fishing (French) 1 reel
Let's Go Fishing (Spanish) 1 reel
Flying Feet (Spanish) 1 reel

Send for complete set of Catalogs, including Bulletins No. 1, No. 2, No. 3 and No. 4.

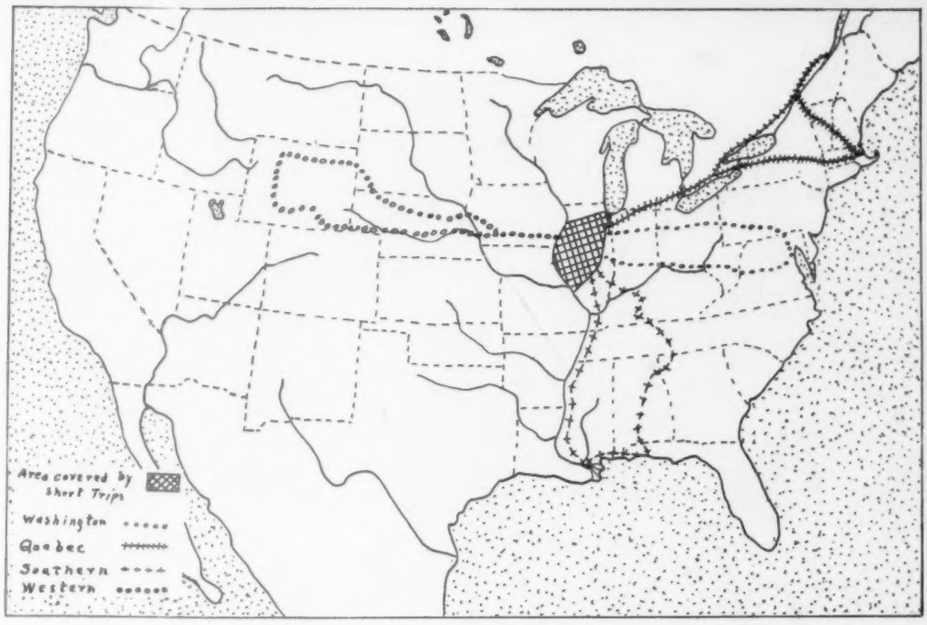
IDEAL PICTURES CORPORATION

28 E. Eighth Street
Chicago

2402 West Seventh Street
Los Angeles, Calif.

January, 1941

The Nation, Our Campus



ALVIN B. ROBERTS
Principal, Haw Creek Township High School, Gilson, Illinois

A detailed account of the workings of an elaborate and thoroughly established school-journey program.

WOULD you like to make a 2500 mile tour of the state of Illinois, visiting many of its leading scenic and historic sites, its most important industrial centers, its capital, and many other places of interest? Or again, would you like to make a 12,000 mile tour of west central, southern, east central, and northeastern United States, visiting not only scenic and historic points, but leading industrial and agricultural sections as well? Before answering either of the above questions, remember the only cost to you is board, lodging and entrance fees. Transportation is free!

Each student entering the Haw Creek Township High School may answer either of the above questions in the affirmative if he wishes to go and his parents give their consent.

The tours covering the state are made in a series of eighteen to twenty or more trips, ranging from a few hours to a full day. It takes the student the full four years to make the eighteen or twenty trips. The long tour is made up of four ten to twelve-day trips, given at the close of the school term. These average approximately 3000 miles each. Since most of the students carry their own lunch on the one-day trips there is practically no expense for meals, and nearly every place visited is free, so there is no expense for entrance fees. The average cost per student on the long tour is twenty-two dollars per trip. This includes meals, lodging, (first class hotels), entrance and guide fees.

It is not the purpose of the author to discuss in this article the value of the field tour, but rather to point out how the entire school curriculum may be enriched through it, and how an extensive program can be developed at an extremely low cost to the Board of Education and the students.

The tour program of this school is based upon the fundamental psychological principle that the child thinks only in terms of past experiences. Therefore, in order to make the classroom experience more meaningful, slides, motion pictures, and tours are used extensively. The motion picture and slide are an excellent means of preparing the student for the field tour. Motion picture films, slides, and flat pictures serve also as a fine method of reviewing and summarizing the school journey.

There are several factors favoring the further development of the tour program in the schools of our country. They are: (1) good highways, (2) rapid and cheap transportation, (3) favorable public opinion, and (4) cooperation of public and private concerns visited.

The idea of a comprehensive tour program for the students of this High School (average enrollment, 90), came into existence seven years ago when the Board purchased a bus for the transportation of pupils. The Board decided to make the bus available to all teachers for field work. The idea of the long tours was not inaugurated until the spring of 1937. Needless to say, the tour program has been revamped in many respects and is still in the embryonic stage.

When the tour program was first introduced, the instructors were asked to plan each trip so that the things studied in the field would correlate with the material studied in the classroom. Most of the instructors were well acquainted with places that could be visited. This is one of the major requirements for planning a successful trip. Each instructor turned in a list of the places he felt he wished each of his classes to visit. He stated the major objectives of each trip, and also the type of preparation he felt was necessary for the students to get the most from the tour.

From a study of the material turned in, it was decided that all trips in the freshman and sophomore years would be open to all students (except the trips in agriculture) and that all trips in the junior and senior years should be made according to different subject fields. Tours were so distributed as to prevent lopsided enrollments in elective subjects because of them.

Many of the details in planning the tour are worked out by the students. While this takes longer, it may be justified because the experience is valuable to them. Better cooperation may be expected from the students if they have a part in the planning of the driving schedule, lunch, rest stops, etc. A brief study of the following tours, showing the points of interest and areas studied, reveals a wide variation in the type and nature of the places visited. If one notes also the films used in preparing the students for the various tours, he sees

that the motion picture and tours correlate very nicely in providing an enriched and varied background of real experience.

Short Tours

I. Galesburg Newspaper (Freshman Class—Community Civics—Conducted by Miss Scudder).
Film—"From Tree to Newspaper"—Study of methods of gathering news, local and foreign; the personnel; machines in the composing room; press in operation; vocational opportunities in the field.

II. Galesburg Post Office (Freshman Class—Community Civics—Conducted by Miss Scudder).
Study of the social and economic value of mail service; various classes of mail; volume of business; the personnel; methods of handling mail, both incoming and outgoing; opportunities in the postal service.

III. Galesburg Sewage Plant (Freshman Class — General Science—Conducted by Mr. Snyder).
Film—"Sewage Disposal"—Study of machinery; automatic recording instruments, automatic starting and stopping of equipment; chemical processes involved in sewage disposal; governmental services rendered; interdependence of members of any community and need of group cooperation.

IV. Lewiston Mounds and Strip Mine (Freshman Class—General Science—Conducted by Mr. Snyder).
Films—"Digging Up the Past," "Bituminous Coal"—Study of life and habits of early inhabitants of this area; research methods involved in obtaining historical information; machinery used in the field and the tipple; formation of coal, leading into geological history of the area.

V. Keokuk, Colmar, Carthage, Nauvoo (Freshman Class—General Science—Conducted by Mr. Snyder).
Films—"Heat and Light from Electricity," "Evolution of Oil"—(Keokuk) generation of electricity; corporations in American industry; automatic equipment; engineering and vision required in planning and building such a plant; physical principles involved in generation of electricity.
(Colmar) Oil fields—pumps at work; how oil is piped to central station; small refinery which makes fuel, gas, and kerosene.
(Carthage) The old jail connected with the history of the Mormons.
(Nauvoo) The Joseph Smith home; site of the old Mormon Temple; other points of interest in connection with the Mormons.

VI. Laura (Sophomore Class—Economic Geography—Conducted by Mr. Snyder).
Advantages of piping oil over other means of transportation; replacing of man labor by machines; study of Diesel engines; electric generators.

VII. Starved Rock (Sophomore Class—World History—Conducted by Miss Scudder).
Hennepin Canal; Starved Rock State Park; Deer Park.

VIII. Springfield and Old Salem (Junior Class—American History—Conducted by Mr. Roberts).
Films—"Abraham Lincoln" (2 reels), "Evolution" (3 reels).
(Springfield) State Capitol Building; Houses of General Assembly; dome; underground passage to Centennial Building; Centennial Museum (Special attention given to the following: display of Indian relics in the North Corridor showing evolution of animals; natural habitat groups, such as the polar bear, deer, etc.; and the birds, eggs, and nests common in this area); Supreme Court Building, Apartment of the Judges; courtroom where judges meet; Lincoln Home; Lincoln Tomb; Governor's Mansion; statues of Richard Yates, Pierre Menard, Stephen A. Douglas.
(Old Salem) The village made famous by the fact that Lincoln lived here for a period of seven years; early pioneer store, saloon, doctor's office, dwellings, plus factories, such as the Cooper show, wheel makers, tanner, etc.; typical furniture and materials sold by early pioneer stores and shop keepers.

IX. St. Louis (Junior Class—Biology—Conducted by Mr. Roberts).
Films—"From Flower to Fruit," "The Green Plant," "Monkeys and Apes," "Some Larger Mammals."
Shaw's Botanical Garden—Orchid room, Cactus plant, Tropical room (including coconut palms, date palms, banana, coffee, and rubber plants), Italian garden, Economic garden (rice, tobacco, sugar cane, cotton, broom corn, European methods of fruit growth), home and tomb of Mr. Shaw.
Forest Park Zoo—Bear pits, seals, reptile house, primate or monkey house, lion house, outdoor group of birds, bird house, outdoor group of animals, giraffe, zebra, kangaroo, raccoon, prairie dogs, etc.
Jefferson Memorial—Statue of Thomas Jefferson, Lindbergh trophies, war relics of the Civil, Spanish-American, and World War period, equipment used by Perry on his dash to the North Pole, Indian relics, costumes of various periods in history from colonial times to the present.

X. Chicago (Junior Class—Biology—Conducted by Mr. Roberts).
Films—"Pueblo Dwellers," "Egypt"—
Field Museum—Races of Mankind; Indian tribes of the Southwest, Great Plains, Colorado, and Indians and Eskimos of the Northwest; horned and hoofed animals; plants, palm plants, foods, foreign woods, North American woods, plant life, plant raw materials; historical geology; Stone Age of the Old World; archeaology of Egypt.
Shedd Aquarium—Fish.
Adler Planetarium—Stars, planets, moon and sun, Earth rotation.

XI. Hannibal (Junior Class — American Literature — Conducted by Mrs. Roberts).
Film—"Mark Twain"—Visits to La Grange College at Hannibal; Home of Mark Twain; Mark Twain Museum; Old Graveyard, Cardiff Hill; Mark Twain Bridge; Mark Twain Cave.

XII. Springfield (Senior Class — Civics — Conducted by Mr. Roberts).
State Capital: Historical dates; the complexity and scope of state governmental activities; the Legislative and Judicial Chambers.

XIII. Chicago (Senior Class—Economics and Physics—Conducted by Mr. Snyder).
Films—"The Story of the Spark Plug," "The Four-Stroke Cycle Gas Engine"—
Board of Trade—Rapidity and extent of international communication via telegraph and cable; modern speculation and methods of dealing; verbal contracts which are binding; historical information.
Rosenwald Museum of Science and Industry—A laboratory of physical and chemical apparatus and experiments; working models, such as airplane motors, coal mines and equipment, electrical experiments, electrical machinery and generators.

XIV. Peoria Caterpillar Tractor Company (Senior Class — Economics—Conducted by Mr. Roberts).
Films—"Behind the Scenes in the Machine Age" (3 reels), "The Manufacture of Sheet Steel and Tin Plate"—Labor saving devices; replacing man labor with machines; division of labor; regional division of labor.

XV. Soils and Crops (Trips to various farms in the community. Agriculture I Class—Conducted by Mr. Strubinger).
Film—"The Cycle of Erosion"—Soil testing, to acquaint the technique of taking soil samples; soil conservation, to see the modern means of saving the soil, terracing, contour farming, strip farming, etc.

XVI. Stock Judging (Trips to various farms in the community. Agriculture II Class—Conducted by Mr. Strubinger).
To see and examine stock to gain a knowledge of both desirable and undesirable characteristics, and to get an accurate picture of what the desirable types of animals actually are.

XVII. Springfield State Fair (Agriculture I, II and III Classes—Conducted by Mr. Strubinger).
To see the stock that is actually brought into the State Fair and see what types of animals various breeders are actually trying to develop. As at the International Livestock Show, to gain inspiration and incentives toward higher levels in our own work. At the State Fair there is a growing tendency for the bulk of the livestock shown to be that of the Union Clubs, 4-H and Vocational. An understanding of what others

are doing is, or should be, inspirational to us in our own work.

XVIII. Chicago International Livestock Show (Agriculture I, II and III Classes—Conducted by Mr. Strubinger).

To see how animals are fitted for show; what show-animals actually look like; amount of finish which is expected; showing of animals in the ring; judging of animals; how an experienced judge actually does it; to compare various breeds of beef animals as they are seen in the show ring; exhibits of grain and hay.

The short tour program may be summarized as follows:

(1) All tours are free to all students. Practically each place visited is open free of charge to students, with the exception of the Lewiston Mounds and the Livestock Show at Chicago. Each trip is made in one day. (2) The total mileage of all short trips is around 2500 miles. (3) Students must be members of certain classes in order to make these trips. The trips have been planned for numerous classes, so as not to have any one class "lop-sided" because of them. (4) The total cost to the District is less than 25c per student transported. (5) Each trip is conducted by the instructor of the class sponsoring the tour. The students are required to make some preparation for each trip and are encouraged to view it as a regular part of their classroom procedure, rather than as a special feature itself. (6) Preparation for some of the tours extends sometimes over a period of several weeks.

The Long Tours

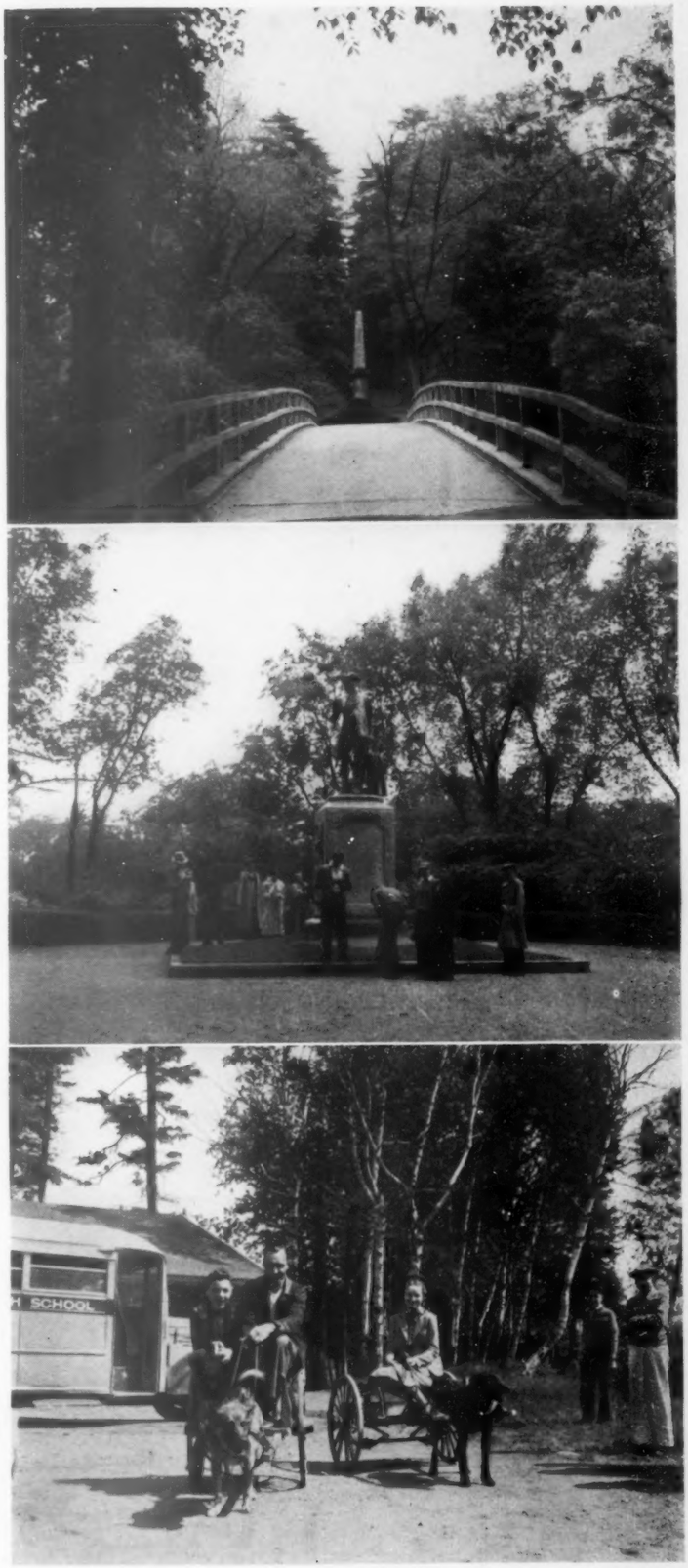
The long tour presents many problems not encountered on the one day trips. Most of these problems may be classified under one of the following:

(1) Securing suitable lodging, (2) Properly balanced meals, (3) Competent and efficient chaperons, (4) Administration and financing of the tour, (5) Providing suitable instruction in the subject fields to be studied.

The conductor of the long tour will soon realize that the hours spent in planning and visualizing the tour in all of its various ramifications will aid greatly in its success. This is equally true in planning either the mechanical or educational phase of the trip.

The following are the major objectives of the long tour program:

To give the students a better knowledge, understanding and appreciation of (1) the more important geographic features of eastern and central United States, which have played an important part in shaping the history of our country; (2) some of the major events in the history of the United States by visiting many of the leading historic sites; (3) some of the leading statesmen, military leaders, and authors of the United States by visiting homes of these individuals; (4) the vast differences in similar occupations, such as, farming on the great plains in the central states, in the southern states, and in the states of the New England group; (5) some of the leading social problems of each region, for example, the negro of the South; (6) some of the problems of our leading cities, such as Boston or New Orleans, where one sees the foreign sections and tenement districts; (7) the leading industries of central and eastern and western United States; (8) the beauty of the United States by visiting some of its most scenic regions. (On each tour there are



Top—Concord Bridge and Monument to the first two British soldiers killed in the American Revolution. Center—Minute Men Statue overlooking Concord Bridge. Bottom—Enjoying a few minutes relaxation at Montmorency Falls, Quebec.

Bits from the pictorial record of the Tours.

A group on the summit of the Big Horn Mountains.

The Monument at Lookout Mountain.

many minor aims too numerous to be listed in this summary.)

Natural Bridge, Washington, Mt. Vernon, and Gettysburg Tour (2160 miles) (Spring, 1937—Repeat, 1941)

Films used: "Thomas Jefferson"—"Virginia, The Old Dominion"—"George Washington, His Life and Times"—"Shenandoah National Park"—"Anthracite Coal."

Points of Historic Interest: State Capital Building, Charleston, West Virginia—Natural Bridge—Washington-Lee University—Birthplace of Woodrow Wilson—Home of Thomas Jefferson, Monticello—University of Virginia—Shenandoah National Park—Fredericksburg, Murray's Heights, Union National Cemetery, Scene of Burnside's Mistake—Old Pohic Church (where Washington attended)—Monument in honor of Mary Washington—Battlefield of Chancellorsville—Mount Vernon—Masonic Memorial, Alexandria—Washington, D.C.—Washington Monument, Mirror Lake, Lincoln Memorial, Arlington Cemetery, Tomb of Unknown Soldier, Lee's Mansion, Capitol, White House, Bureau of Engraving and Printing, Embassy Section, Smithsonian Institute, Congressional Library—Annapolis, Naval Academy—Baltimore— Battlefield of Gettysburg—Pittsburg, Iron Region.

Geographical Points of Interest: Ohio River—Appalachian Mountains, W. Va.—Tide Water Region, Virginia—Chesapeake Bay—Mountain Regions, Eastern Pennsylvania.

Economic and Industrial Regions: Farming regions of Illinois, Indiana, and Ohio—Mining region of West Virginia—Orchard regions in the valleys of the mountains of Virginia—Tobacco producing regions of Virginia—Truck growing regions, Virginia and Maryland—Iron region of Pittsburgh.

Niagara, Boston, Montreal, and Quebec Tour (3208 miles) (Spring, 1938—Repeat, 1942)

Films used: "New England Shrines"—"Transportation on the Great Lakes"—"The Province of Quebec"—"The Puritans"—"Mohawk Valley"—"New England Fisheries" (2 reels).

Points of Historic Interest: Detroit, Early American Village, Edison Museum, Museum of Transportation—Erie Canal—Troy, New York—Concord—Lexington—Boston, Old Ironsides, Bunker Hill Monument, Italian Section, Old North Church, Paul Revere's Home — Plymouth, Plymouth Rock, Plymouth Museum, Ancient Home of Plymouth—Ft. Ticonderoga—Quebec, Ancient Walls of the City, Old Fort, Chateau Frontenac, Plains of Abraham, Scene of Arnold and Montgomery's Battle—Montreal, Ft. Chambly.

Geographical Points of Interest: Sand Dunes, Lake Michigan—Sandy truck-farming area, Michigan—Lake Erie—Niagara Falls—Niagara River — Mohawk Valley and Erie Canal—Hudson River—Berkshire Mountains, eastern Mass.—Atlantic Ocean—Mountains of Vermont and New Hampshire—Lake Champlain and Richelieu River Region—St. Lawrence River—Montmorency Falls.

Economic and Industrial Regions: Automobile industry, Detroit—Truck growing region around Detroit—Flat farming region of Ontario—Orchards, especially grape, truck and small farming of New York—Fishing industry of Boston—Shipping industry, docks of Boston—Paper industry at Three Rivers.

Mammoth Cave, Chattanooga, Pensacola and New Orleans Tour (3010 miles) (Spring, 1939—Repeat, 1943)

Films used: "The Old South"—"The New South"—"The River"—"New Orleans"—"Cotton, From Seed to Cloth" (2 reels)—"Stephen Foster"—"The Negro Farmer"—"Sugar Cane"—"Dixie" (3 reels)—Yale Chronicles.

Points of Historic Interest: Vandalia, Old State House, State Farm, Old Cumberland Road, which had its terminus at Vandalia—Vincennes, George Rogers Clark Memorial Bridge, George Rogers Clark Monument, William Henry Harrison Home, Land Office where Lincoln secured his grant of land for his Illinois farm, First Library in Northwest Territory, Old French Church—French Lick, Indiana—Louisville, Kentucky, Home and Tomb of President Taylor, Burial Place of George Rogers Clark—Bardstown, Kentucky, Old Kentucky Home, Old Cathedral—Hodgenville, Kentucky, Birthplace of Lincoln—Mammoth Cave—Nashville, Tennessee, Hermitage, Home of Andrew Jackson, Replica of Old Greek Parthenon, Battlefield of Murfreesboro—Chattanooga, Tennessee, Battlefield, Lookout Mountain—Montgomery, Alabama, State Capitol Building—Pensacola, Florida, Naval Base—New Orleans, Louisiana, Site of Battle of New Orleans, French Section, Spanish Section—Vicksburg, Mississippi—Jackson, Mississippi, State Capitol Building.

Geographical Points of Interest: Wabash River—Ohio River—Unglaciated Regions of Kentucky, Tennessee and the Gulf States—Appalachian Mountains—Gulf Coastal Plains—Gulf of Mexico—Flood Plains of Mississippi Valley—Mississippi Delta—Mississippi River.

Economic and Industrial Regions: Tobacco regions, Kentucky and Tennessee—Tobacco Warehouses and cigarette factories of Louisville—Cotton, Tennessee and Alabama—Fishing and commercial industry, Mobile and New Orleans.

Bad Lands, Black Hills, Yellowstone Park and Grand Teton Tour (3315 miles) (Summer, 1940—Repeat, 1944)

Films used: "Grassland"—"Yellowstone National Park"—"The Cycle of Erosion" — "Conservation of Natural Resources."

Points of Historic Interest: Territory included in the Louisiana Purchase—Portion of area explored by Pike—Portion of area explored and discovered by Clark's expedition to the Pacific Coast — Custer Battlefield — Portion of territory ceded to United States at the close of the Mexican War—Early fort in the Black Hills region near Rapid City—Scene

(*Concluded on page* 24)

Minnesota's Growing Visual Education Service

PAUL VEBLEN
As Told by
ROBERT A. KISSACK JR.
Director of Visual Education, University of Minnesota

A brief account of extraordinary development and growth possible in University Visual Instruction Service when adequate resources are available.

IT IS only eight years ago that the Visual Education service at the University of Minnesota was born. But already it has grown to be one of the largest departments of its kind in the country and has finer equipment—and more of it—than any similar service in any other American university. It outgrew its first quarters in 1935 and is already cramped in the rooms it took over at that time.

The staff Robert A. Kissack, Jr. had under him when his service was established in 1932 consisted of only two men—electrical engineering students who worked part-time in the Visual Education department. Those three, given a few pieces of projection equipment, began the job of collecting and classifying educational movies, slides and other visual aids, and got under way a program of supplying classes of the new General college with illustrative materials desired by instructors. The project was intended to be on a merely experimental basis during its first year, but at the end of that year it had proved its worth and its continued existence was insured. Instructors in all parts of the University found the new service of such real value that in 1932-33 more than 290 showings of motion pictures and slides were made. Most of these bookings were in the General college, but the idea was beginning to spread throughout the campus.

Since then, the service has increased in scope. Last year the bookings topped 2,500 and the staff was more than 10 times the size of the original one.

But what sort of home does this enlarged but still typical visual education department have? If another school were to establish a similar service, what parts of that home would they find it profitable to copy?

Office

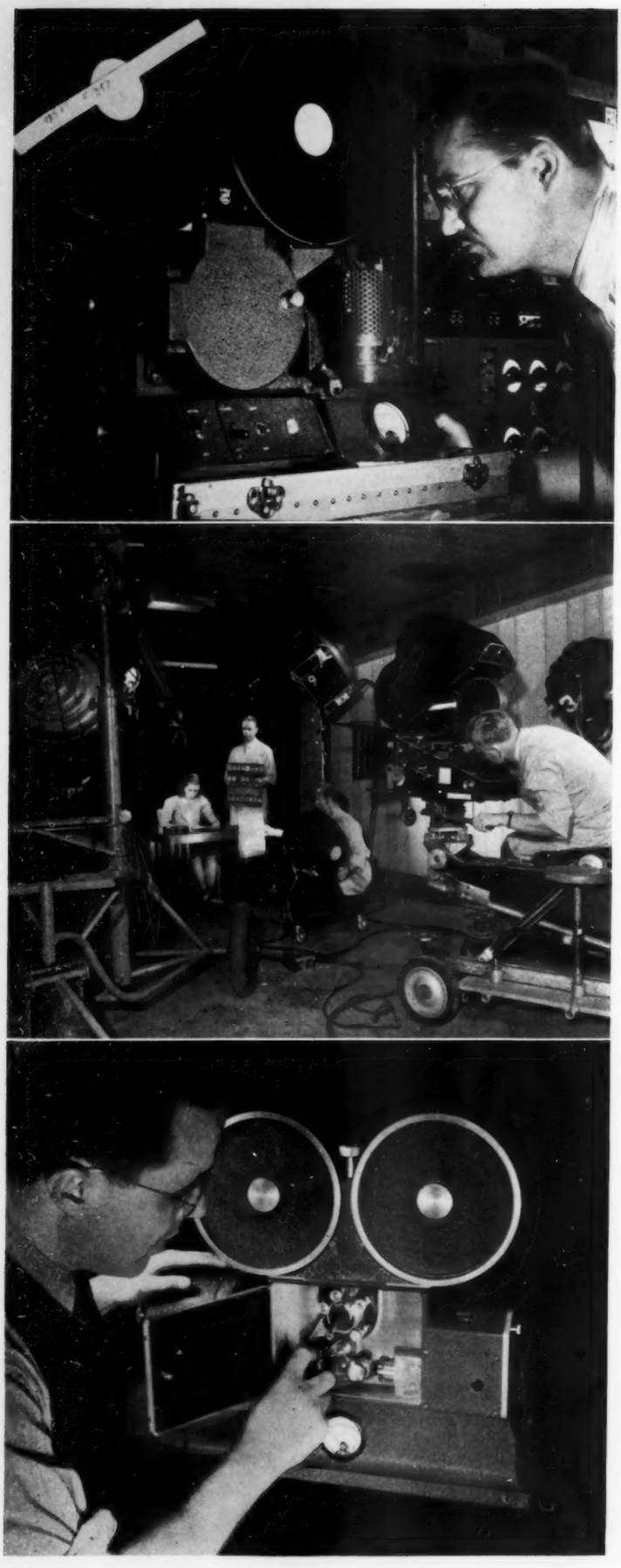
Headquarters of Minnesota's Visual Education service are in Wesbrook hall, a building located conveniently near the center of a large campus. Here is filed all available information concerning slides, motion pictures and other visual aids that might be helpful to faculty members in any department of the University. From here all activities of distribution, production, projection and maintenance are directed.

Often as many as 22 classroom showings of pictures —sometimes five or six of them simultaneously—are handled by the projection crew. Merely to arrange the details of this complicated daily booking schedule requires the constant attention of Harold B. Jensen, an assistant of Mr. Kissack. A small rental charge is made when each motion picture or set of slides is shown, and within a few years this part of the service will become completely self-supporting.

Preview Studio

This 15 x 30-foot room, furnished with collapsible chairs, seats an audience of 24 persons. Nearly every

Left—Cine Special in home-made blimp for interlock sound shot. Center—Truck which is complete mobile sound camera unit, with specially built platform for camera in blimp. Right—Presto disc recording.



Top—35mm RCA Sound Recorder. Center—Sound interlock set-up for shooting close shot. Bottom—16mm Berndt-Maurer Recorder.

day previews of educational films are held here for members of the University faculty. The room is carefully sound-proofed and is, in fact, a room within a room, with the inner walls separated several inches from the outer walls. Excellent acoustics are insured by the cork floor and acoustically treated walls and ceiling.

At the front of the room is a sound screen with a built-in speaker. There are three ventilation outlets in the ceiling and a series of inlets within the walls themselves. Because of the room's excellent sound insulation, it can be used for sound recording and camera work.

At the rear of the studio is a raised platform, accommodating four chairs and a long, narrow preview bench with an inclined surface. This surface is evenly lighted by a series of shielded, tubular lights, giving adequate illumination for reading or writing but not enough to detract from the illumination of the screen at the front of the room. During preview, notes are taken on the sources of the pictures, their condition and photographic qualities, direction, educational level and value, the teacher's comments and an analysis of the contents of the films. All this information is later transferred to special cards arranged in a master file system in the front office.

Projection Booth

The projection booth adjoining the preview studio is fireproof, ventilated, and has four projection ports and four observation ports of double glass. Soundproofing of this booth insures complete silence in the preview room during projection. Because of the four projection ports, programs can be conveniently shown in which four different kinds of films and projectors are used. The booth is provided with a film cabinet and facilities for rewinding.

Recording Booth

The recording booth, like the projection booth, is lined with sound-proof material. A large double glass window separates it from the preview studio, where microphones are installed for recording purposes when necessary. There are loud-speaker facilities for two-way communication between the recording booth and studio. A switch for the warning light outside the studio door —controlled also from the studio—prevents interruption during recording.

Most of the recording is done for the speech department, which sends over classes of students on a regular schedule. Each student has his voice recorded at the beginning and end of the quarter on a 6-inch acetate disc, which he buys at a very small cost for classroom and individual study. For the speech clinic, where speech defectives are treated, 16-mm sound movies, also made in the preview studio, have proved quite successful. With the sound movies to study, students suffering from speech impediments can hear, see and analyze their difficulties and cure is thereby facilitated.

Students of Robert J. Sailstad, coordinator of speech in the General College, also see action before the Visual Education service cameras and are better able to correct their speech faults after studying motion pictures of themselves.

Film Vaults

The film vaults are provided for storage of all University-owned motion picture film. One has a capacity of 2,500 reels and the other a capacity of 750 reels. They are fireproof, and by means of special insulating and cooling systems both humidity and temperature can be maintained at most satisfactory levels for film preservation.

There is another storage room where numerous types of portable projection equipment, both for slides and movies, are kept. Stored there too are screens, cameras, lights, microphones, amplifiers, and many odds and ends. The portable projectors are scheduled by Mr. Jensen for classroom use throughout the University to supply the needs of rooms where permanent installation of such equipment is not justified. The University has, at present, nearly 150 slide projectors and about 50 motion picture projectors of different types.

The University's portable public address equipment is also scheduled by the Visual Education service for use throughout the campus.

Cutting Room

In the cutting room—a long, narrow one—is an editing bench, complete with splicer and other necessary equipment. At one end is a small dark room in which loading and unloading of cameras is conveniently done.

Every attempt is made to keep the cutting room free from dust and dirt. Walls are painted glossy white, windows sealed, and clean air supplied by a special blower. As an additional precaution, all cutters wear clean gloves and laboratory coats when handling negative.

Shop

A small shop provides for the never-ending stream of repair, construction and maintenance jobs made necessary by the servicing of so many different types of projection and amplifying equipment. It has also proved invaluable in the building of various equipment not available from manufacturing companies. In it, for instance, was constructed a lighting and power distributing unit and switchboard with 20 outlets, extremely compact and easily transported for location shooting.

It is in these surroundings, which also include a shipping room and two laboratories, that the work of the University of Minnesota's Visual Education service is carried on. Other schools planning to establish similar departments would find it profitable to investigate those quarters.

How To Choose A Still Camera

A highly concrete presentation of specific points to be considered in the purchase of a camera.

M. RICHARD DICKTER
Furness Junior High School, Philadelphia, Pa.

WITH the current interest in photography and the increasing use of the "still" photograph and transparency, made by the individual teacher or school, for educational purposes, the problem of choosing a still camera from the bewildering array of those available, bewildering not only to the beginner but also to the advanced amateur and professional, is indeed a complex one. This article was prepared with the hope that it would aid those educational workers who are faced with this particular problem.

The prospective purchaser must decide for himself what camera to buy: The question he must answer in arriving at this decision is: What camera within the price range I can afford to spend is best for the sort of photographs I want to make? A variety of picture-taking possibilities will now be discussed.

1. *Do I expect to take only snapshots now and then under favorable outdoor light conditions (bright sun) of motionless subjects not too close to the camera?*

A camera of the fixed-focus type with no shutter speed adjustments, with no lens openings to set and with no focusing scale will answer this purpose. Such a camera may be of the box type, or, if this is too bulky, there are smaller, more compact ones of the same kind available.

2. *Do I want to take pictures without a tripod under more unfavorable light conditions outdoors, or indoors by photoflood or of subjects involving slight motion?*

A camera is needed with shutter speeds of 1/25, 1/50, 1/100 second or faster and an f6.3 or faster lens. Naturally, the faster the lens, the more expensive the camera.

3. *Do I want to take pictures without a tripod under very unfavorable light conditions outdoors during the day or in relatively poor artificial light indoors or outdoors at night?*

A camera for these purposes must have a lens of speed f 2.8, or f 2 or even f 1.5. Such high-speed lenses are made only for the miniature cameras, that is, cameras taking pictures of size 2¼ x 2¼ or smaller. Extremely fast lenses for larger cameras would be too bulky and would have to be of such large diameters that their cost would be prohibitive. As faster film of good quality is placed on the market, there will be less and less need for the ultra high-speed lenses for all general purposes.

4. *Do I expect to take fast action shots?*

Then the camera should have fast shutter speeds of 1/1000 second, or even faster, and fast lenses if such pictures are to be made under unfavorable light conditions.

5. *Do I expect to do much work for which careful composition is desirable, such as portraits and copying?*

A camera with ground-glass focusing is advisable for such work to permit accurate composition. The image

as seen in the ground glass is the same size as it will be on the negative and very much as it will look on the final contact print. In addition, for copying, the camera should have at least a double bellows extension to permit real close-up work without auxiliary attachments.

6. *Do I want a camera that takes interchangeable lenses, that is, lenses other than the one with which the camera was originally provided?*

There are occasions when lenses other than the standard one are advantageous, or even necessary, such as telephoto lenses for "close-ups" at a distance or wide-angle lenses that will cover a greater area.

7. *What size negative do I want my camera to take?*

Negative sizes may vary from 35 mm. to 8" x 10", or even larger. Any camera will take pictures of only one size, or, in some cases, two at the most.

Miniature cameras and larger cameras each have their advantages and disadvantages. In general, they may be summarized as follows, although it must be remembered that all the items do not hold true for all cameras.

Advantages of Miniature Cameras

a. Convenient to carry around because they are small and do not weigh much.

b. Less noticeable, making it easier to take so-called "candid" shots. Any size camera, it should be noted, if it has a reasonably fast shutter speed and lense, will take a candid picture, provided the subject is not aware the picture is being taken or does not pose.

c. Ultra fast lenses, usually found only on miniature cameras, make possible snapshots under unfavorable light conditions.

d. The short focal length lenses that are standard for miniature cameras have great depth of field.

e. Film for miniature cameras is inexpensive.

f. The 35 mm. size is very convenient for making filmstrips.

Disadvantages of Miniature Cameras

a. If big enlargements of excellent quality are desired from the small negatives, a good miniature camera is needed, and good ones cost considerable money.

b. Do not have shifting lens fronts and shifting backs for correcting distortion.

c. Not particularly good for portraits.

d. To obtain consistently good results with a miniature camera it is necessary to develop considerable skill in using it and to exercise great care in processing the negatives and in enlarging them.

e. Because the contact prints are too small to be of much practical use, enlargements are necessary. The added expense of the more frequent enlargements to some extent nullifies the advantage in being able to use the relatively inexpensive film.

f. Difficult to retouch the small negatives.

Advantages of Larger Cameras

a. A cheaper large camera will do as good a job as a more expensive miniature camera and with less trouble.

b. Lenses to give negatives that will produce satisfactory big enlargements can be obtained more cheaply because they need not be as good. The negatives are large to begin with and so it is necessary to enlarge only a few diameters to obtain big enlargements.

c. Easy to make a satisfactory enlargement.

d. Less skill required for negative processing.

e. Easier to retouch negatives.

f. Shifting lens fronts and shifting backs available on some cameras.

g. The large-size ground glass found in certain of the larger cameras permit careful composition.

h. Better for portraiture and architectural studies.

Disadvantages of Larger Cameras

a. Inconvenient to carry around because of their large size and weight.

b. Because very fast lenses are unavailable, they are not as useful for snapshots in poor light.

c. Not as convenient for candid work.

d. The long focal length lenses used on the larger cameras have a shallow depth of field. However, this shallow depth of field may become an advantage in certain cases, such as when it is desired to blur a background.

e. Most of the larger cameras cannot be adapted for the making of 35 mm. filmstrips.

8. *Do I want to be able to develop my negatives, or to change to other type films, before the roll is completed?*

Then a camera that takes cut film or film pack is needed.

9. *Shall I want to use my camera for special work, such as copying, photographing through a microscope, microphotography (photography of small objects), scientific work, etc.?*

The camera must be of the kind that can do these special kinds of work and that will take the necessary accessories.

10. *What type focusing do I want on my camera?*

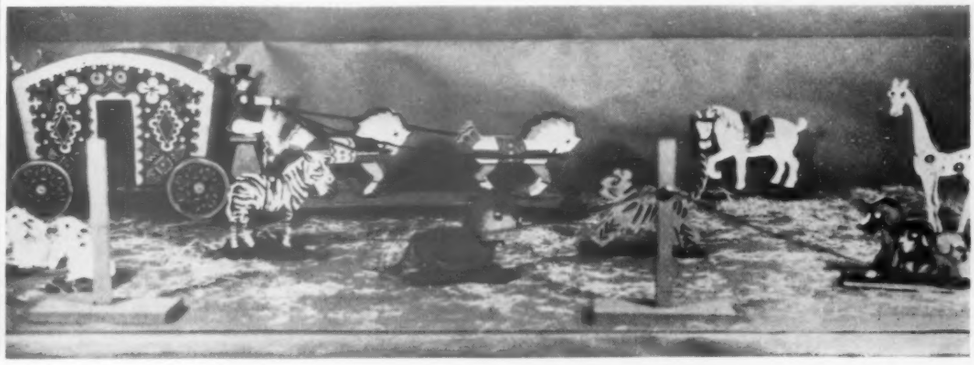
Cameras may be divided into several classes depending upon their focusing arrangements (all these types may be obtained in several sizes):

Fixed-focus Cameras. These require no focusing—all objects from a few feet to infinity are in reasonably sharp focus. Examples are the box cameras and their "stream-lined" versions.

Non-automatic Focusing Cameras. These cameras have to be focused but they have no focusing device outside of a distance scale on the bed of the camera or around the lens assembly. The distance has to be estimated or measured and the lens set at a point on the distance scale corresponding to the actual distance.

Coupled Range-finder Cameras. A range finder is a device for determining distance accurately from the camera position. When looking through the range finder, one sees a double image or a split image of the subject. By manipulating the adjustment on the range finder the two images, or the two halves of the split image, can be made to coincide. The correct distance may then be read on a scale. If such a range finder is coupled to the lense of the camera, the lens moves back and forth as the range finder is manipulated and when the two images of the subject (coincidence type range finder) or the two halves of the image (split-field type) coincide in the peep window, the lens is automatically

(*Continued on page 28*)



Examples of school activities photographed by the Camera Club. Left—Masques made by art class. Below—Tabletop photography: part of a "circus" made by art pupils.

An Assembly Project Developed By School Photographic Clubs

W. EDGAR GLENN and **JAMES L. GORDON**
Roxboro Junior High School, Cleveland Heights, Ohio

How a school, starting with practically nothing, developed photographic activities of real interest.

"THE pupils of Roxboro were in for a big surprise and an excellent assembly sponsored by the Camera and Visual Education Clubs."

The above title heading and excerpt, taken from a recent issue of our school paper, reveal the favorable reception of a joint club project which marks a forward step successfully taken by the photography clubs of our school. It is far more revealing if one is aware of the activities of these two clubs and the roles they have played in school activities. The pleasing reception of the clubs' work has prompted the sponsors to recount the history and activities of the clubs leading up to the consummative assembly in the hope that it may have some value to others.

The assembly was made up of two phases. The first part, programmed by the Camera Club, was made up of a series of lantern slides of scenes about the school. They consisted of pictures of our stage crew, teachers, football teams, basketball players, school officers and others. The second phase was a motion picture film taken by the Visual Education Club. This film included various classroom scenes and was highlighted by scenes taken of our annual Father and Sons Banquet attended by members of the Cleveland Indians Baseball Team and scenes from a surprise party given our principal, Mr. Davidson, on his birthday. Both phases were extremely interesting to the student body as evidenced by the enthusiastic reception. It was a surprise, indeed, to realize that the school's photographic clubs had produced such an assembly. Of course, the students had reasons to suspect something in the air for now and then they had witnessed various students busily engaged in snapping shots about the school and the use of photoflood lamps after school hours. But now the air was buzzing with comments as to how and when the program was developed. The inquiries were so numerous and persistent that, we, the sponsors, were motivated to put our story into print.

As primarily established, the Camera Club was interested in the processing of films. With such an interest in mind it was first necessary to have a darkroom. After some searching, we were able to convert one of the school custodian's rooms into our laboratory. Fortunately, the school was being rewired at the time and the electricians accommodated us by wiring our darkroom with sockets which made possible convenient and proper lighting for our working bench. Next, various students worked during their free periods in making our laboratory absolutely lightproof.

Having our laboratory an accomplished fact, we now turned to the matter of equipment. Since the club had no funds and we did not favor assessing the members with dues, it became a voluntary matter. Each student brought some of the essential equipment for the use of the club. One loaned the trays, another, a printing frame, still another provided us with a ferrotype plate. And so it was until we had the minimum amount of working tools to develop and print. Finally, the club was ready to launch its work.

The club as such, held one meeting a week, yet we soon found it necessary to spend more time either after school or during free periods of the school day to meet the desires of the members to either learn the fundamentals or pursue more advanced work. Furthermore, an added incentive pressed us for time. A working agreement was made with our school paper to take the pictures to be used by the paper. Recognition for the pictures was made in the paper. Consequently, the

members of the club increased their efforts in order to receive recognition in the paper. The increased efforts resulted in additional experience. Yet, this work became a matter of routine and the club members looked to new interests. One such interest was the making of lantern slides.

Since we had a great many negatives of places and persons about the school we used them in the making of our first slides. Of course, our success was not instantaneous. After making a slide, we would project it in our club meeting room. Here it was that we were able to see the deficiencies of our slides and strive by discussion and investigation to find the causes of our troubles and remedy them. After several such post mortems we were at last able to produce good quality slides.

The Visual Education Club, as originally organized, felt that there were many worth while sound and silent motion picture films available which had high educative value, but were not entirely suited to regular classroom work. Another primary task of the club was to evaluate films which were not regularly used in the classroom, and to offer suggestions of films which seemed worth while in the regular curriculum, to the various departments of the school.

The club had not progressed far before several of the members became interested in knowing how these various pictures were produced. A small group wanted to make some pictures of our own. Consequently, we made an investigation of the minimum of materials needed, and the cheapest means of procuring worth while equipment since most extra-curricular activities in school are handicapped by finances.

We first secured a used Victor camera. Since most of the school activities are done inside the building, this necessitated artificial lighting. Photoflood light stands were made by mechanically minded pupils. Old music stand bases, which had been discarded by the music department, served as a starting point. Rods that just fit the bases were secured from the Board of Education. These would slide up and down to change the height and direction of the lights. The pupils made a U clamp from sheet copper to fit an ordinary key lamp socket and soldered the two together. This combination was attached to the end of the rod.

Ordinary 12 inch reflectors which made the "floodlight" stands complete were purchased. Recently, we have tried the new "photoflood" lamps with built in reflectors and we find that we get almost twice the amount of light with a bulb of the same wattage. This increased efficiency is extremely important in color photography since it requires comparatively "slow" film. Also, these lamps avoid giving a too heavy overload of the electric wiring.

In order to use the "photoflood" lamps efficiently (maximum life is six hours), the sponsor suggested to one of the boys that he make a series-parallel connection for three lamps operated by one switch. In the series connection the lamps were dim, but sufficient light was given for the setting. As a result, the shadows, reflections, and other important considerations could be studied without decreasing the life of the lamps to any appreciable extent. When the switch was pressed, the bulbs were then thrown in parallel (bright) for actually taking the picture. However, a short time should elapse after the bright lights are turned on before taking the picture to allow the participants to appear more natural.

Several other things which were not possible or practical to make had to be purchased. A camera tripod with a panning head, a good exposure meter (a necessity), and a table tripod were purchased second hand.

Films were purchased for the camera by small contributions of the club members. The pictures taken thus far have been mainly of the activities of many of the school clubs, assemblies, and athletics. One series of pictures was taken of the Father and Sons Banquet showing the awarding of letters to athletes and the pictures of several baseball celebrities who were in attendance. Trick shots are always fascinating to pupils.

When these films produced by the Visual Education Club were shown in the assembly, an attempt was made to have them similar to a talking picture. A sound machine with a microphone attachment was used for the projection of the films. Pupil commentators explained the pictures as they passed upon the screen. In order to give a background for the picture there was a musical accompaniment with the school electric phonograph. The volume was low when the commentator was speaking but was made much more audible between the remarks.

The impetus of the assembly has been obvious. Almost immediately, having taken the assembly reception as a vote of confidence in their ability, the clubs have turned to new plans and work. For example, before much time had elapsed, the Camera Club was approached for developing and printing service. One, in particular, was extremely interesting. The Red Cross Club, engaged in preparing an album of our school work to be sent to Hawaii, made arrangements for our club to take the school scenes for the album. One of the comforting results is that our problem of funds is rapidly being solved. It appears that the club will soon be providing for film service at a low cost for the student body. This in indeed encouraging for the club may become self-sustaining. Furthermore, it will permit us to expand. Already, we are looking forward to purchasing an enlarger or else constructing one in the Industrial Arts Shop. At present, one boy is constructing a printing box. Another is learning to blue print. Yes, their interests are varied but they are eagerly pursuing them. One day in the future, we may hear of their names again.

Results of the club activities may be summarized as follows:

First, club members were rewarded for their efforts and with an increased appreciation and renewed confidence set out upon new fields.

Second, school-made pictures could easily be used for community publicity of school activities.

Third, various types of abilities and interests of pupils have been utilized in this project and the ability of eighth and ninth grade pupils to make the apparatus and actually take the pictures is surprising.

Fourth, evidence of the ability of junior high school students was attested to when these pupils presented their slides and films before a teaching methods class of a local university. Their enthusiasm and commendations were most hearty.

MOTION PICTURES— NOT FOR THEATRES

Installment Twenty-three — largely devoted to the varied and important pioneer work of a single figure in the early days of educational films.

By **ARTHUR EDWIN KROWS**

IN the Agricultural Extension Department of Iowa State College, in 1924, were made two reels on the use of fertilizers, entitled "Pay Dirt." That same autumn, at the Indiana University extension division, the Athletic Department, coöperating with the Bureau of Visual Instruction, produced "King Basketball," the aforementioned picture on the fundamentals of that game, a film which stirred especially high hopes when outsiders learned that six prints had been sold to other universities, and that in three months 104 towns had rented it at two dollars per day each.

H. W. Norman, secretary of the Bureau, helped the day dreams along by proposing a concentrated effort to follow this example with productions in the departments of physics, geography, health, agriculture, botany, physical training and many others presumably needed. "Colleges and universities have specialists who can plan such films," he wrote in the *Educational Screen* for April, 1925. "Schools and organizations should offer encouragement when such production is attempted, by renting the material and offering constructive criticism. The development of visual education and the educational film calls for coördination of numerous educational forces."

But how ever useful these isolated efforts may have been, they were insufficient in number to give body to the visual education movement. Even granting the awakened sense of exclusively pedagogical requirements, one may say that in that period the need was much less for quality than for quantity. But, with insufficient funds, where was the quantity to come from if not from the old theatrical sources of supply? There were producers ready and reasonably well qualified to make subjects to order; but they had to be supported in doing it. Otherwise, Alfred H. Saunders might have undertaken the job through his Educators' Cinematograph Foundation, which, until mid 1937, was still listed on the building directory, at 70 Fifth Avenue, New York; Fred Lincoln of Boston, whose office, when he was associated with Parker, of Worcester, issued what are said to have been the first film teaching syllabi, might have done it; or there was Horace G. Plimpton.

In speaking of Plimpton it is necessary to use a longer breath, for that worthy gentleman has not previously been mentioned and he deserves identification. He was for seven years production manager of Thomas A. Edison's motion picture enterprises, with strong personal interest in the inventor's educational experiments. He prided himself later on having directed "at least one-third of the educational films in the library of the University of Wisconsin." (Aha! So that was how Edison came to compliment Dean Reber!) And, about 1915, I believe, he, and some "qualified associates," as his opening prospectus stated, incorporated Plimpton Epic Pictures of New York.

Of the commercial interests which stood eager to provide the schools with reëdited theatrical material — and these included the regular theatrical exchanges as hereinbefore mentioned—none appeared more successful for a brief time in contracting with an important school system, than T. K. Peters. In 1916, by my records, he had been production supervisor of the Florida Feature Film Company. According to his own statement, he began in pictures about 1898, and had taken his camera actively over some 90,000 miles in sixteen months, covering Europe, Asia and the Orient. He

F. S. Wythe relinquished a career as a successful San Francisco attorney to promote and produce school films.

claimed to have been the first man in Egypt with a motion picture machine, and in 1920 declared that he had spent the preceding nine years preparing for the introduction of films into schools.

In the autumn of that same year he seemed securely in place as executive head of a film project exhaustively to serve the New York City system. One may only guess how successful his service might have been for, after having tested some of his biological reels before classes in P. S. 45 in the Bronx, and Number 62 in Hester Street, he committed the tactical error of giving a large interview to the press. With incidental bows to Dr. Ernest L. Crandall and Miss Rita Hochheimer, who were reported to have been "most enthusiastic," he told a *Times* reporter that his films, correlated with the standard syllabi of the New York City Board of Education, would begin modestly with ten schools and spread thence to the others. . . .

I believe that his pictures were acquired subsequently by Harry Levey in an enterprise to be described later in these pages.

Frederick Stephen Wythe

THOSE of Chicago and New York, who felt the responsibility of the visual education movement upon their shoulders, were curiously unaware of a remarkably well conceived and well developed school film enterprise which had originated as early as 1918 on the Pacific Coast, and which, but for some untoward circumstances outside itself, might have supplied the field heavily. Even the astute Harley Clarke seems to have missed it, despite the fact that its existence was called to his attention. An important educator on the Western seaboard had been noticeably cold to Clarke's S.V.E. product, and Clarke had written and asked him to suggest something better. The answer was a proposition to send him one of Wythe's civic series to use as a model.

Wythe—Frederick S. Wythe—a young San Francisco lawyer, was the principal figure of the undertaking. For reasons hereafter apparent, the reader may well pause to consider him. He was a native Californian, born December 29, 1883, at Placerville—Mark Twain's old "Hangtown"—near Sacramento. His father was a Methodist minister whose ancestors, a few generations back, had helped to settle New England when it was still called Northern Virginia. Beyond that the Wythes had been sturdy yeomen, in a line clearly to be traced to the days of William the Conqueror. That heritage, with some modern technical touches administered by the law school of the University of California, had produced a most promising new member of the Golden Gate legal profession.

The roster of his clients included some celebrated names, that of the "plant wizard," Luther Burbank, being, perhaps, widest known. There also was the Reverend Paul Jordan Smith, pastor of the Central Methodist Church in San Francisco. Smith's name may evoke no ripple of interest in this younger generation; but, in the years just before the World War, the national press, from West to East, featured it as the high symbol of a public sensation. Smith had come from Iowa, by way of Malden, Mass., to a horrified contemplation of the San Francisco den of iniquity called the "Barbary Coast." He had initiated and led the crusade which finally wiped it out. The achievement brought him many proposals for additional reforms, including the idea of perpetuating the original example in a motion picture, that other communities

might profit readily from it. The idea came most temptingly in the shape of a scenario prepared by Grace Sanderson, a writer whose grandfather, I understand, had once been mayor of the city. Smith was intrigued, and worked out plans for the production, involving a professional cast headed by Crane Wilbur. The picture was actually made, and was released as "The Finger of Justice." By this time Smith was so interested that he resigned his pastorate and went East to arrange for countrywide theatrical distribution.

Wythe, as Smith's attorney, naturally had opportunity to see how the matter was negotiated and carried through. It made him realize the sociological potentialities of the screen—and he also saw some others. Moreover, Abbott, chief cameraman on "The Finger of Justice," talked to Wythe about the possibilities of educational films, mentioning the name of a friend (a wealthy retired gentleman whose income was represented largely in profits from a motor he had invented for the Victor Phonograph Company) who, with a little persuasion, might entertain a proposition to produce. The gentleman was at hand, living at San Rafael.

To know Wythe was to understand how contact with a situation of that sort would stimulate his thinking processes. He was then, as he remained in later life, a man absolutely without the usual "conceits of wisdom." He desired, above all things, to learn; and he would learn from anybody, high or low, who had knowledge to offer. I remember his laughing remark to me when first we met: "Be careful about exposing any useful information you have; I soak it up like a sponge." That was literally true; but Wythe's mind, unlike so many encyclopedic ones, did not just store information. His tireless mental process quickly digested, classified and applied it. For him to think of the educational possibilities of motion pictures, therefore, was for him to do something about it. With Lenwood Abbott to assist him in planning, he formed, tentatively, the Science Film Corporation. However, nothing came directly from that.

Wythe wanted to try out the idea, but where, he asked himself, was there a place in which an unpretentious film might be made to render a conspicuous service? It was in wartime, then, in 1918, and committees on Home Defense were urging all civilians to save for the sake of the soldiers overseas. One of the urgent pleas was to cultivate the home garden. And when Wythe went for advice to a professor at his *alma mater*, the University of California, it was suggested that he should produce a film on home gardens. He conferred about it with Charles Moore, head of the Home Defense group in the area, and that gentleman not only heartily approved, but assisted Wythe to make many helpful contacts.

So that picture was duly made, using "locations" in the suburban schools of Berkeley and Oakland, where Educators Wilson and Hunter, respectively in charge of those systems, gave friendly pedagogical advice and hearty coöperation. As to funds, the Junior Red Cross supplied part of the money required to make it, and the Federal Government agreed to take $2,500 worth of prints, the University of California acting as treasurer.

Harry B. Wilson, superintendent of the Berkeley schools, was already enthusiastically interested in visual education. In 1922, he was to begin those tests and applications reported in a monograph published about 1924 by *Educational Screen*. His visual education department, headed by Miss Anna V. Dorris, was to attain a certain celebrity among educators. His discussion, *Modern Methods in Teaching*, written in collaboration with George C. Kyte and Herbert G. Lull, was one of the first substantial works on the specialized subject to be published in book form.

By now the educational film bacilli had multiplied beyond control in the young lawyer's blood. He decided, on the strength of this first experience from which he characteristically had gained about thrice what it would have brought to a less receptive experimenter, to plunge deeply into the work. He took an office from which the new enterprise might be more efficiently conducted, and, unable to be there constantly without neglecting outside obligations, approached a friend, an elderly, retired, former business executive from the East, to preside there for him.

This once active gentleman, with time hanging heavily on his hands, gladly acceeded. But he was too much interested in Wythe and what Wythe was doing to be just a figurehead. His identity explains much of that attitude, for he was John MacNair Wright, whose mother, Julia MacNair, had been an educator celebrated for her school readers. To further his purpose of real participation, he had conceived the idea that, while Wythe was developing the educational films business to a point of proper profit, there ought to be a subsidiary line to pay in the interval and he had determined that this expedient should be a film laboratory.

Wythe was not favorably disposed to the thought. As he said, it would be that much more to worry about—two businesses instead of one—and he surely had plenty, right then, to occupy his mind. But Wright insisted, saying that he'd build the laboratory at his own expense. When it came to that Wythe could no longer oppose his friend, so he worked with Wright at every available moment to make the laboratory a model institution of its unpretentious kind. I do not recall all of the details which have been told me about that laboratory from time to time; but one point I do remember is that the camera for shooting titles and doing trick photography, was made sufficiently large *for a man to step inside* to see how things were going on there. Anyone who has despaired over the buckling of a film on a reversed camera movement, or over a refractory takeup, will appreciate at once the great advantages of this arrangement. It came about merely because Wythe, characteristically refusing to take anything for granted, had asked himself why the interior of a fixed camera, which did not have to be carried around, had to be a tiny place, when a large, roomy one could be kept just as dark.

Wythe had organized as the F. S. Wythe Pictures Corporation; and he had done it with the great interest and attention of a number of wealthy San Franciscans whom he had met mainly in the Home Defense wartime activities. And presently they joined him in practical support. Among those who took shares were Charles Moore, who had been one of the heads of the Panama-Pacific Exposition; Alfred Esberg, the president of the Board of Education of the Schools of San Francisco; A. B. C. Dohrman, head of the Pacific Coast Division of the American Red Cross, who was also president of the largest mercantile store chain in that area; Robert Oxnard, important in the affairs of American Beet Sugar and after whom Oxnard, California, was named; and Tom O'Day, generous, broad-gauged owner and operator of the Hippodrome Theatre. Among the smaller investors was Chamberlain, of the *Sierra Educational News*. Productions on the immediate working schedule comprised a series of films designed by Wythe to start school children on the road to better citizenship. In addition to the two garden reels, already made, there were about fourteen others in the plan. It was decided to produce just a couple of this civics series at first, to see how they would measure up. To make them, Tom O'Day summoned from Los Angeles his friend, Jess Robbins, a veteran picture director. Robbins did the work faithfully and well, and would accept nothing from Wythe for his services. The photographic results that far were so encouraging that work was commenced quickly on the others. This time the director engaged was MacMackin, from the staff of the old American Motion Picture studios at Santa Barbara; the cameraman was Karl Weiden.

But technical assistance of this sort was not all which Wythe had sought. At the outset he had realized the need of expert pedagogical advice. On the recommendation of schoolmen who had assisted him on the garden films, he now decided that the educational director should be C. A. Stebbins, of the U. S. Bureau of Education at Washington. Accordingly, and without personal acquaintance with Stebbins, he wrote to Philander P. Claxton, then national commissioner, but received only a routine acknowledgment of his letter. Undaunted, he contacted a friend of his father who happened to know intimately an officer higher than Claxton, namely, Franklin K. Lane, Secretary of the Interior, and asked him for assistance.

This friend, explaining the circumstances and the complete worthiness of the enterprise to Lane, succeeded in bringing about the assignment of Stebbins to the San Francisco district; and Stebbins, therefore, actually did serve as educational director on the Wythe civics series. He served conscientiously, actively

and well. From that association Wythe soaked up professional information at the usual, astonishing rate. Stebbins, who had not been too happy at having been requisitioned from other interests in that summary manner, seems to have remained a little crabbed despite his irresistible scholarly interest; and he taunted Wythe, more than once, about his presumption in trying to produce educational films when he had had no training as a teacher. "All you know about pedagogics even now you have picked up from me," he averred. And, as Wythe guilelessly remarked to me one day, "Stebbins probably was right."

However, knowing Wythe and his citizenship pictures as I do, I believe, without in any sense meaning to deprecate the fine service of Dr. Stebbins, that Wythe himself supplied much of the subsequently demonstrated teaching force of the series. It was inherent in his original plan. Like the expert dramatist who sees a play as incomplete without theatre, actors and audience, he always thought of the classroom picture as being only a part of the full visual situation; there had also to be teacher, classroom and pupils.

Seeing the finished citizenship reels without these related factors, therefore, was extremely disappointing. They seemed flat, uninspired, obvious—even amateurish. But put them in a classroom —where I have seen them so successfully demonstrated; have them carefully introduced, intelligently applied and wisely dismissed by an interested teacher; admit attention of youngsters at the stipulated age levels, and these remarkable films fairly glow with teaching life. Moreover, they did what exceedingly few school films made under supervision of qualified educators ever have done before or since—they employed skilfully the long-neglected, but powerful factor so envied in the theatre, emotion.

Wythe's progress, thus being made on the basis of intelligent forethought, was generally smooth. There were, of course, unexpected complications. The most disconcerting probably, was the sudden death, while asleep, of his first film business associate, the kindly, elderly John MacNair Wright. This occurred less than a year after the start of the enterprise. It left Wythe with the film laboratory which he really had never wanted. But Wright's son came on the scene and, in the fine spirit of his sire, carried on the dead partner's obligations until Wythe was able to arrange with his newer associates to buy him out.

In that laboratory, by the way, was developed and printed a theatrical feature film starring Dorothy Revier, produced in San Francisco. The makers couldn't meet the bill. But Tom O'Day loaned them a couple of thousand dollars to tide them over until they could regain their proper strength. The incident is interesting, because that picture was one of those upon which the present, powerful Hollywood corporation known as Columbia Pictures, took its rise.

When the citizenship series was complete, and teaching syllabi had been prepared, Wythe's production experience was temporarily over. He had now to prove his faith by selling sets to the schools. So he relinquished his law practice and took to the road for that purpose. He worked at this successive phase with his usual intelligence and unflagging energy; but it was not easy. He found himself trying not only to sell school films, but also an advanced visual method which had not yet been officially recognized by the educators. His demonstrations were admittedly brilliant; but the schoolmen wanted the supporting results of tests, for which there had been no time, and for which they naturally would not themselves supply the funds. Nevertheless, Wythe succeeded in selling one set to the Los Angeles public schools.

Then, hearing that visual education was booming in the East, he boarded a train with another set and came to New York City to try for better luck there. For the present, while he is in high hopes, and with plenty of humanly good reasons for being so, let us leave him.

Chapter VII—A Swarm of Specialists

THERE were certain kinds of producers with whose basic knowledge schoolmen in general could not presume to quarrel. All they could reasonably dictate would be *the use* of his material. They might tell a man who had spent the best years of his life photographing birds that they didn't want his shots of orioles and owls to be on the same reel for showing in the identical lesson period; but, by and large, they would be obliged to admit that he probably knew more about the habits of both than they did. Or, if a given educator did know more about owls and orioles, but recognized the precious authenticity of this much already on the reel, he could realize that, without great expense and perhaps years of leave, he could not hope to duplicate the film. Hence the pictures made by these particular specialists gained a somewhat easier entrance and footing in the classroom.

The gifted Englishman, F. Percy Smith, who first conspicuously developed and applied the photographic principles of compressed action—the "bud-to-blossom" man—was trained in teaching methods before he began his brilliant work; but they were approaches peculiar to the English system and therefore did not dovetail into American curricula as native teachers wished. Even *his* reels, therefore, were altered many times from his original arrangements, making them conform with local and regional needs in the United States. But they have been pruned and recast more gingerly than has been done, say, with John Doe's "Life on the Farm," upon which subject material equally good might have been obtained by almost anyone with a movie camera; and had Mr. Smith, or his representatives, insisted on a hands-off policy to preserve the integrity of his arrangements, the educators concerned probably would have yielded—because F. Percy Smith, with presumed flaws, is vastly better than no F. Percy Smith at all.

F. Percy Smith had many imitators, and/or emulators; and, as the volume of such material increased, the force of his possible insistence that no "reëditing" be done, was necessarily lessened. But even the emulators, in his case, found the work tremendously difficult and out of all proportion to the comparatively small margin of profit; so that kind of picture remained a rarity anyway, and respect for it was generally maintained.

Smith's position was especially strong in that his own, personal output was so generously large. Had he made only one or two pictures of this precious type, his work could not have been so effective in breaking down arbitrary oppositions to classroom uses of motion pictures. A convenient illustration of what might have happened is the isolated case of Dr. Chance. Educators might have called an extra assembly of the children to view Dr. Chance's notable film entitled "The Cuckoo's Secret," but, with no successor of equal merit in the same department of learning, that, so far as the schools were concerned, was virtually the end of it.

Birds, Beasts and Flowers

"THE CUCKOO'S SECRET" was actually one of several remarkable studies of bird life made by different individuals in England, each for the purpose of settling some moot point about the habits of the given subject. It is singled out for mention because it became the best known of the group at that time, and also because it set the example for most of the others to follow. It was first shown in New York in the early summer of 1923, released by Bray; but, of course, it had been screened in London months before that. Its production came about fortuitously (it was not I who said "by Chance"), when the ornithologist who was to make it happened upon an English rural district in which cuckoos were unusually many. That was in 1918. He realized that the opportunity for proving the long-disputed habits of the robber bird was exceptional, and spent several successive seasons studying them.

In 1921, with locations and circumstances carefully chosen, he engaged a cameraman to photograph the telltale situations showing the cuckoo substituting its own egg for that of the intended foster parent, and the infant cuckoo ousting the proper children from the nest to obtain all the parental attention. He produced another picture record in 1922, using a slow-motion camera. He thus cleared up a highly debatable matter and earned the encomiums of ornithologists throughout the world. Nevertheless, "The Cuckoo's Secret" remains an irregular item for educational purpose. And it illustrates once more, the greater importance to the visual education movement of having fifty fair-to-middling reels covering the curriculum, than having just half-a-dozen masterpieces and no related subjects to bridge the gaps between.

(*Continued on page* 42)

In and for the Classroom

Conducted by WILBER EMMERT
State Teachers College, Indiana, Pa.

Expanding the Classroom

IN AN effort to expedite the education of the youth, and to promote greater efficiency in teaching techniques, school rooms and school houses came into being. With the growth of formal education and the demand for increased education for the masses, the classroom too often became a place where lessons were assigned, and tasks performed solely for school room purposes. When the door closed for "school to take up," the four walls of the room became barriers to the world of reality, and constituted inescapable boundaries to thoughts and actions. "Book learning," lesson learning, and lesson **re**-citation flourished in the midst of abstractions and unrealities.

Many thoughtful teachers and constructive educators, while wholly cognizant of the importance and necessity for comparatively strict, formal classroom work in certain aspects of the educative process, have been continually striving to expand the classroom beyond its physical walls to the environment of persons and things in the complex social and economic structure of a world of realities in which the pupils live, and will continue to find themselves. Among other things, they recommend the school journey as a technique to achieve this objective.

The school journey, when properly used as a learning activity, constitutes an excellent means of expanding the classroom and providing for more direct sensory experiences with the realities of the environment than does the formal classroom work. The school journey provides sensory experiences, which constitute the basis for perceptual learning; gives concreteness to the materials used in the classroom; constitutes a means of clarifying concepts and an understanding of the principles involved in pnenomena; and stimulates the interest of pupils in the work which they are undertaking, as well as widening the range of their interests. These broadened horizons may provide new experience realms in which discovered interests may lead to a whole host of purposeful activities.

The school journey technique can be employed in every subject of the school curriculum, and in practically every unit of every subject. Contrary to a common notion, the school journey does not of necessity have to be a "Trip to a Factory," or a "Trip to the State Capitol." The trip may be short or long, cursory or intensive. The teacher, however, in her lesson planning must decide on the outcomes to be acquired, and the techniques which will best achieve the desired ends. The classroom may be broadened by a few field trips during the term, or it may be expanded tremendously as is indicated by such course titles as: "A Field Course in Biology," "Enriched Mathematics," "A Field Course in Geography," etc. Such course titles indicate that while the classroom will be used for some of the work, the greater share of the class time will be spent in actual functional relations with the materials of the courses in their natural settings.

The following accounts which follow indicate briefly what one school is doing in several of its subject matter fields to expand the classroom, with its accompanying benefits to the pupils.

Junior High School Mathematics

Interest and anticipations mount in the Junior High School mathematics classes as their work approaches the study of right angles, right triangles, and related problems. With the study of those concepts the classes always spend several days outside the classroom at different points on the school ground. Initial study, preliminary work, and some problem solving familiarize the pupils with the fundamental concepts and principles, and indicate how they can be used to solve actual problems of real life. Mastery of the instruments to be used in the field study is readily undertaken by the students, for they see the necessity of such knowledge. Pupils and teacher working together plan the problems to be solved, prepare data sheets, and organize the materials for each problem. Separate data sheets are prepared in advance for each of the measurements to be made. One for the height of the specified building; another for the flagpole problem; a third for the distance across a lake or river (in this case, across the street into an adjoining lot); etc. As indicated in the picture, some students are taking readings with the hypsometer, others are making measurements with the take measure, while still others are securing data for another problem. Each group makes its measurements, takes its records for each problem, then is ready to make the mathematical computations. Either on the field or in the classroom the pupils work out the answers to their problems and can then check the accuracy of their

Junior High Mathematics class in the field.

Left—Museum case showing development of our written records.
Below—Class visits the Weather Station.

work by group discussions. The next step then, is the construction and solution of original problems. The results of this expanded classroom technique indicate that the mathematical principles are more clearly understood, skill in securing and recording data accrued, applications to life situations could readily be made, and that the interest generated assisted in carrying the students far forward into the next units of the course.

Sixth Grade Study Communication

To assist the sixth grade with its study of "Communicating With Our Neighbors," a number of museum units were set up in the school library. This work was done by the librarian, the English supervisor, the Art supervisors, a history teacher, and one of the science teachers. The librarian and the sixth grade teachers then arranged a schedule of class periods for this group to have exclusive use of the library for its work. In some cases the museum displays were set up in advance, and at other times, the pupils themselves assisted in making, securing, arranging, or labeling the items of the display. One major exhibit was "Development of Our Written Language," another, "Using Electricity for Communication," a third, "Sending Messages by Mail," another, "How Sounds Carry Messages," etc. In addition to the museum displays, the library reference work, and their construction activities, trips were made to the post office, the telephone office, the newspaper plant, etc., using the approved well-planned school journey techniques for these visitations.

The accompanying picture illustrates one of the museum cases in which "The Development of Our Written Language" is delineated. During this phase of the study the children learned that after man had developed articulate speech, there came a need for a written language so that he could communicate with others at a distance, or at a later time through the use of written records. The children saw also that our spoken, written, and printed words are abstract symbols for concrete things. And that these symbols evolved through picture writing, Egyptian hieroglyphics, to our alphabet. They learned further, that in considering the development of our written records it is necessary to give attention to: (a) the material on which the written record is made, (b) the instrument used in making the record, and (c) the material of media used in making the record.

All these concepts were attractively presented in the exhibit, as will be seen by studying the picture. Briefly, on the upper shelf in the case and to the right is shown the picture writing of the American Indians (made by the pupils by cutting Chamois skin in the shape of a buffalo robe, then copying a message in pictures on it); the white stone of the bottom shelf contains Egyptian Hieroglyphics carved on it in 2200 B. C. (Egyptian Hieroglyphics constitute the transition between the picture writing and the early alphabets); Babylonian, Cunieform writing, etc., are illustrated on the middle shelf; likewise on the third shelf is a page of 13th century, illuminated manuscript; and on the next to the bottom shelf will be seen some quill pens, a scroll, steps in the making of a book, and some printed matter. The wampum model in the upper shelf to the left was made by the pupils, using strips of Chamois skin threaded through short sections of macaroni. Proper labels and appropriate reference lists accompany each item in the display. Separate guide sheets and selected reference lists were given to the students for their use while studying this problem. Considerable attention was given to this problem because most of the other types of communication embody a written record in some fashion.

The other problems were appropriately studied in as much detail as deemed proper for sixth grade,

(*Concluded on page* 41)

The Literature in Visual Instruction

A Monthly Digest

Conducted by Etta Schneider

Administration of Visual Aids

Why Certain Difficulties Are Encountered in Handling School Films—B. A. Aughinbaugh—*Ohio Schools*, 18:424. Nov. 1940.

A reply to certain limitations mentioned in a previous article by Clyde K. Miller. The article has most value for teachers in Ohio. Others will be impressed by the unusual service rendered by the State Visual Education Department to the schools of that state. The director of the state service, in this article, reveals that in one year 90% of all requests were granted for the dates wanted, 5% were booked for second choice, dates listed by the applicant, and only 5% had to be rejected. Films reach the school a day in advance of the showing, to permit preview by the teacher.

In answer to Mr. Miller's complaint about the vocabulary limitations of subtitles or narration in films, the author wisely explains that films can change the grade placement in which certain topics may be presented because vocabulary levels do not exist for pictures. The meanings of the pictures sometimes reach the child before his vocabulary can give him labels (words) to designate the things he sees, but more frequently the visual experience hastens his vocabulary enlargement.

The caution is again made that films and other visual aids are merely a visual track to the mind, and not a separate entity to be taught as visual education or visual instruction. What is actually meant by audio-visual aids is instruction conveyed by visual communication.

How Greenwich Manages Its School Films—Eleanor D. Child—*American School Board Journal*, 101:47, November, 1940.

A detailed report of the progress made by the Greenwich schools in organizing its audio-program with the help of a teacher's part-time attention. The budget is approximately $900 or 52c per student for materials other than the purchase of machines. An increasing library of purchased films is being built up and a small number of free and rented films supplement them. Read the original article for further information.

Man Who Launched Visual Education in the Rural Schools of Texas—H. T. Musselman, Dallas—*The Texas Outlook*, 24:52. Nov. 1940.

The story of Superintendent D. H. Boon of Cass County, Texas, who was able to provide films for the children of that rural country through a traveling film unit, transported by truck. The truck serves as a library and film service, and it can reach four schools a day without strain on anybody. It is hoped that there is a direct relationship between the selection of films and the children's curriculum experiences, but no mention is made in the article of this aspect of the program.

School-Made Films and Other Visual Aids

Local Industries Help Make Film Material—Harrison U. Wood, Racine, Wis.—*Occupations*, 19:180-3 Dec. 1940

An excellent article, describing in full a project in which lantern slides were made to describe some of the basic occupations in local industries. The author is principal of the Franklin Junior High School, as well as chairman of the civic development committee of the local Association of Commerce. He secured the cooperation of the superintendent of schools in planning and organizing the plan. A committee of teachers, supervisors and counselors set out to plan the details. They decided to produce lantern slides, rather than film strips or motion pictures. About 30 to 35 slides for each industry would be included. A long-range program was carefully prepared by this committee. The next step was to seek cooperation from local industries to defray cost and help to permit the photographing. Eight copies of each set of slides was needed to supply all of the junior and senior high schools in Racine. A science teacher in the junior high school was to be in charge of actual photographing. He was a member of the planning committee and spent seven weeks during the summer preparing for the project.

A list of slide sets to be prepared during the next five years is given. This article should be read in its entirety for further details.

Teaching with School-made Films—William G. Hart—*Scholastic*, 37:5-T, November, 1940.

The outcomes to be expected from a well-planned film-making program, illustrated by the experiences of some high school students.

Lantern Slides Teach Business—Alexander Selwyn, Franklin K. Lane High School, N. Y.—*Nation's Schools*, Dec. 1940. p. 53

The teachers of business training made a survey of teaching aids available in that field and proceeded to make slide sets of those topics that seemed especially necessary. The lantern slide was selected after a trial with film strips. The lesson units deal with mailing, telegraph, savings banks, banking, etc. Charts, cartoons and other materials are included in the slides.

Why Not a Movie?—Robert E. Johnson, Production chief, Continental Pictures—*Design*, 42:20-1 Dec., 1940

The activities of a local amateur movie-making group in Kearney, N. J. in which no member is over eighteen years of age. A national Amateur Movie Producers of America organization has been organized, consisting of other juvenile amateur movie groups in the country. Eight groups comprise this national organization: Century Films, Santa Ana, Cal.; Continental Pictures; Empire Pictures, Chester, Pa.; Modern Films, Stillwater, Okla.; Pixilated Pictures, San Antonio, Tex.; Skyline Productions, Kansas City, Mo.; Trans-National Pictures, Youngstown, O.; and United Pictures, Buffalo, N. Y.

Techniques of Utilization

Visualizing Astronomy—Ruth Livermon—*Scholastic*, 37:6-T, November 25, 1940.

How an intermediate group of children were guided in their understanding of the relation of the moon to the earth by using a sound film, "The Moon."

Lantern Slides in the Classroom—Granville Jensen, Bellingham—*Washington Ed. Journal*, 20:64. Dec. 1940.

A summary of the types and uses of slides.

A Housing Study—Correlating a National Problem with a Community Project—Joseph C. Baumgartner—*Social Education*, 4:470-3, November, 1940.

This is one of the best accounts to appear recently on a unit of work developed by a group of high school students on a vital modern problem. The background of the students, the nature of instructional aids used, the activities of individuals and of the group are all clearly indicated in the brief space of the article. A listing of films found helpful in the study is appended.

They Want to Know—R. L. Currie, Wilmington, Delaware—*Social Education*, 4:466-9, November, 1940.

The twelfth-grade class in social studies began its study of the community with the showing of the March of Time film on "Juvenile Delinquency." The subsequent discussion brought out many questions dealing with the effects of slums, disease, penal reform, housing, social service, rehabilitation programs and the organizations at work in each field. From this beginning, the students proceeded to get information from first-hand contact with city officials as far as possible. They made a study of the city

(*Concluded on page* 30)

Among Ourselves

Notes from and by the Department of Visual Instruction of the National Education Association.

Conducted by JAMES D. FINN
Colorado State College of Education, Greeley

To the Members of the D.V.I.:

The program of the winter meeting of your Department is printed in these columns for your consideration and approval. It is hoped that many members will show their approval by attendance at the meetings although it is realized that many others who might wish to attend are prevented from doing so because of the distance to Atlantic City and because of other responsibilities.

Even if you cannot be at Atlantic City there are others from your school system or institution who probably will be there. Why not let them know about the meeting of your Department and urge them to attend?

Yours sincerely
PAUL C. REED, *President*

PROGRAM

Winter Meeting of the Department of Visual Instruction
February 24, 25, 26—Atlantic City—Hotel Traymore

Monday, February 24

FIRST SESSION 9:30-11:30 a.m.—Submarine Grill

Greetings from the New Jersey Visual Education—Association—Arthur M. Judd, President, New Brunswick, N. J.

President's Report: *The Challenge of the Unsolved Problems*—Paul C. Reed

Criteria for Selecting Motion Picture Projection Equipment—John A. Maurer, Chairman, Committee on Non-Theatrical Equipment, Society of Motion Picture Engineers

A Critique of Summer Courses in Visual Instruction—Floyde E. Brooker, American Council on Education

Business Meeting

Luncheon—Informal—Form your own party and eat where you wish

SECOND SESSION 2:15-4:30 p.m.—Submarine Grill
THEME: VISUAL AIDS IN DEFENSE OF DEMOCRACY

Address: *Education in Defense of Democracy*—Ralph W. Tyler, University of Chicago

Report: *The Visual Aids We Have*: A Verbal and Visual Review—Blake Cochran, American Council on Education
(There will be a screening of some of the best films related to the theme of the meeting.)

Discussion: What Shall We Do with Materials Available? What Should We Do to Stimulate the Production of Needed Materials? What Precautions, if any, Should Be Taken in the Use of these Materials? Can These Materials Be Used to Coordinate the School and Community Program for American Defense?

Tuesday, February 25

THIRD SESSION 9:30-11:30 a.m.

9:30-10:00—Rose Room—Introducing the Chairmen of the Group Meetings to follow. Each will present briefly the problems and questions to be considered in his meeting.

10:00-11:30—Group Meetings

Group A—Rose Room—*Can the Schools be Better Served?* A discussion of the problems of visual aids distribution—B. A. Aughinbaugh, Chairman, State Director of Visual Education, Ohio

Group B—Fountain Room Balcony, East—*What Visual Aids are Schools Producing?* Including a discussion of "school-made" motion pictures—William G. Hart, Chairman, Dearborn, Michigan

Group C—Fountain Room Balcony, West—*How Can We Bring About Better Utilization of Visual Materials?* A discussion of pre-service and in-service training—Ford L. Lemler, Chairman, University of Michigan

FOURTH SESSION — Luncheon Meeting
—12:15-2:00 p.m.—Submarine Grill

Reports of the Morning Group Meetings by the Chairmen

The Wartime Use of Motion Pictures in Britain—Richard Ford, British Library of Information

FIFTH SESSION 2:15-4:30 p.m.—Submarine Grill
THEME: FREE MATERIALS—A BLESSING OR A BLIGHT FOR EDUCATION?

A Symposium of Ten-Minute Opinions—Edgar Dale, Chairman

O. H. Coelln, Editor, Business Screen Magazine

John E. Hansen, Chief, Bureau of Visual Aids, University of Wisconsin, representing a state film library point of view

Boyd B. Rakestraw, University of California, representing another film library point of view

Godfrey Elliott, Director, Audio-Visual Aids, Mercer County Schools, Oakvale, West Virginia, representing a point of view of the public schools

Ernest LaFollette, John D. Pierce Junior High School, Grosse Pointe, Michigan, representing the teachers who use free films

William H. Hartley, State Teachers College, Patterson, New Jersey, presenting standards for evaluation

Edgar Dale, presenting a preliminary summary leading to general discussion

General Discussion

Wednesday, February 26

9:30-12:00—Meeting of the Executive Committee
Meeting of the Committee on Field Experiences
Meetings of other Committees as called by Chairmen

Official Membership Roster – Department of Visual Instruction

Adams, E. D. Elyria, Ohio
Admin. Library Pittsburgh, Pa.
Akins, L. M. Washington, D.C.
Albertson, C. E. Cincinnati, Ohio
Albino, Louis Sidney, N. Y.
Alleman, C. C. Luck, Wis.
Allen, H. B. Morgantown, W.Va.
Althouse, A. D. Detroit, Mich.
American Lib. Assn. Chicago, Ill.
Anderson, O. S. Fargo, N. D.
Archibald, W. F. Kilgore, Tex.
Armour, May Pittsburgh, Pa.
Arnold, E. J. Nelsonville, Ohio
Aspinwall, F. E. Fort Collins, Col.
Astell, Louis A. Urbana, Ill.
Aughinbaugh, B. A. Columbus, O.
Balcom, A.G. New Providence, N.J.
Bancroft, E. Battle Creek, Mich.
Bardy, Joseph Philadelphia, Pa.
Barden, C. M. La Rue, Ohio
Barr, H. L. Morgantown W.Va.
Beal, B. O. Tacoma, Wash.
Beebe, Ralph E. Naperville, Ill.
Beer, Carl R. Buckhannon, W.Va.
Beierlein, M. Fort Wayne, Ind.
Bell, F. M. Princeton W. Va.
Bert, Reese E. Modesto, Cal.
Bowen, Ward C. Albany, N.Y.
Brice, Ethel E. Youngstown, O.
Brooker, F. E. Washington, D.C.
Brumbaugh, D. Fruita, Colo.
Buckler, Bruce Casey, Ill.
Burdick, H. O. Alfred, N.Y.
Burke, H. A. Kearney, Neb.
Burke, Mrs. H. F. Rome, N.Y.
Burns, Merle J. Lesterville, S.D.
Burke, J. W. San Francisco, Cal.
Burt, U. S. Corvallis, Ore.
Byrne, A. Glick Los Angeles, Cal.
Cain, M. E. Davenport, Ia.
Capital University Columbus, O.
Carley, Verna Milwaukee, Wis.
Carroll, John S. San Diego, Cal.
Cass, George T. San Jose, Cal.
Cawelti, Donald Winnetka, Ill.
Chandler, Wm. F. East Rutherford, N. J.
Clark, Ella C. Winona, Minn.
Cleveland, W. R. Downers Grove, Ill.
Cochran, L. W. Iowa City, Ia.
Coers, W. C. Orange Grove, Tex.
Coffindaffer, F. Princeton W.Va.
Com. High School Dupo, Ill.
Conger, H. G. Chicago, Ill.
Connor, Ruth Tallahassee, Fla.
Cook, G. S. Ft. Lauderdale, Fla.
Cook, Lloyd A. Columbus, O.
Cooper, Lewis B. Lubbock, Tex.
Cox, Ernest L. Jersey City, N.J.
Craig, Jeanette Sacramento, Cal.
Crane, A. H. Marion, Ohio
Crawford, E. W. Montclair, N.J.
Creative Ed. Soc. Mankato, Minn.
Cross, C. L. Normal, Ill.
Crumb, Myer L. Kerman, Cal.
Crutcher, G. L. Louisville, Ky.
Cummings, O. G. Sacramento, Cal.
Dale, Edgar Columbus, Ohio
Dalrymple, C. W. Lansing, Mich.
Darlington, E. H. Wayne, Pa.
Davies, Samuel E. Lakewood, O.
Davis, F. W. Columbus, Ohio
Davis, Jennie L. Cincinnati, O.
Davis, N. Evelyn Long Beach, Cal.
Davis, O. R. Orlando, Fla.
Davis, Rex H. A. Atchison, Kan.
Day, M. McCabe Huntington, Ind.
De Bernardis, Amo Portland, Ore.
Dent, E. C. Camden, N. J.
Dickerson, D. F. Nashwauk, Minn.
Dickson, Bryan, San Angelo, Tex.
Dillon, Hubert Fowler, Kan.
Dolores, Sister M. Joliet, Ill.
Dudley, Wm. H. Chicago, Ill.
Dugdale, Lee A. Denver, Colo.
Dyer, J. Eliz. Washington, D. C.
Dyer, W. C. Columbus, O.
Eastern Ill. Teachers College Charleston, Ill.
Ebv, George Stockton, Cal.
Edwards, C. M. Port Byron, N. Y.
Elkins, H. M. Hollywood, Cal.
Elliott, G. M. Oakvale, W. Va.
Elliot, Keith. Battle Creek, Mich.
Emmert, Wilber Indiana, Pa.
Evans, Marian San Diego, Cal.
Fairbury Schools Fairbury, Neb.
Ferguson, B. W. Jersey City, N. J.
Files, Ralph E. E. Orange, N. J.
Findlay, B. A. Los Angeles, Cal.
Finn, James D. Greeley, Colo.
Fisher, G. E. Selingrove, Pa.
Francis, C. B. Indianapolis, Ind.
Franklin, Mary Detroit, Mich.
Gambah, J. C. Peoria Ill.
Gebhart, R. C. Cleveland, O.
General Films Regina, Can.
George Peabody College Nashville, Tenn.
Gibbony, Hazel Columbus, O.
Glendale Sch. Dist., Glendale, Cal.
Gnaedinger, W. G., Pullman, Wash.
Goette, W. L. Gainesville, Fla.
Golterman, Eliz. St. Louis, Mo.
Grainger, J. H. Meridian, Miss.
Gray, Rebecca. Washington, D. C.
Greene, Nelson L. Chicago, Ill.
Gregory, W. M. Cleveland, Ohio
Griffin, Harold D., Wayne, Nebr.
Hal's Camera Shop, Medford, Ore.
Hale, Ralph I. Oceanside, Cal.
Hamilton, George Meadville, Pa.
Hancock, Annie Salem, Va.
Hansen, J. E. Madison, Wis.
Harden, J. T., Elon College, N. C.
Hart, Gardner L. Oakland, Cal.
Hart, Wm. G. Columbus, O.
Hatch, Arthur Baltimore, Md.
Haworth, H. H. Pasadena. Cal.
Healey, Hazel Milwaukee, Wis.
Heer, A. L. Kent, Ohio
Heinaman, F. S. Edinboro, Pa.
Henderson, H. A., Indianapolis, Ind.
Henning, Vera Toledo, O.
Hicks, Samuel, Pearl River, N. Y.
Hogan, M. L. Laurens, S. C.
Holland, B. F. Austin, Tex.
Holliday, E. F. Regina, Can.
Hollinger, J. A., Pittsburgh, Pa.
Honeycutt, A. W. Chapel Hill, N. C.
Howse, Charles Florence, Ala.
Houston School Dist. Houston, Tex.
Hudson, Ray, Clarksburg, W. Va.
Hunter, J. W. Watago, Ill.
Irion, Mary C. Hollywood, Cal.
Irwin, Mrs. John Houston, Tex.
Israel, Marion, Los Angeles, Cal.
Janssen, Ulricka Pekin, Ill.
Jarrott, J. W., Hutchinson, Kans.
Jefferson Jr. H. S. Minneapolis, Minn.
Jensen, H. B., Minneapolis, Minn.
Jensen, H. R., Minneapolis, Minn.
Jensen, J. H. Aberdeen, S. Dak.
Johnson, A. F., Jacksonville, Fla.
Johnson, M. E. North St. Paul, Minn.
Judson, Lyman, S. Kalamazoo, Mich.
Kalal, Vera M. Pender, Nebr.
Kelly, Fred E., State College, Pa.
Kent State College Kent, Ohio
Kerstetter, N. California. Pa.
Kinder, Jas. Pittsburgh, Pa.
Kinney, Cora Chatham, N. J.
Kirchner, Mrs. P. Cleveland Heights, O.
Kirwin, Edwin A., Winona, Minn.
Kjellstrom, L. Wash. D. C.
Klein, M. R. Cleveland, O.
Kooser, H. L. Ames, Ia.
Kradel, Joseph C., Pittsburgh, Pa.
Kruse, Wm. F. Chicago, Ill.
Kuckuk, H. M., Milwaukee, Wis.
Lain, Dolph Moline, Ill.
Lane, F. Edgar Miami, Fla.
Lash, Lewis M. Dearborn, Mich.
Leech, Florence. Nashville, Tenn.
Le Favour, Helen, Detroit, Mich.
Lemmon, C. C. Salt Lake City, Utah
Lewin, William Newark, N. J.
Lewis, Donald Red Wing, Minn.
Lewis, K. St. Petersburg, Fla.
Leiser, Else Milwaukee, Wis.
Liming, S. O., Yellow Springs, O.
Lindstrom, C. A. Wash., D. C.
Linville, R. B. Lafayette, Ind.
Livermon, Ruth Norfolk, Va.
Long, A. L., Nacogdoches, Tex.
Long, John J. Loudonville, O.
Lowrey Jr. H. S., Dearborn, Mich.
Lowry, Antoinette, Columbus, O.
Machen, L. W. Hampton, Va.
Mack, Helen A. Alton, Ill.
Maddock, W. H., Rochester, N. Y.
Mahan, Bruce E., Iowa City, Ia.
Mahnke, C. F. Des Moines, Ia.
March, O. J. Cleveland, O.
Maynard, Mrs. B. Orlando, Fla.
Meissner, Amelia St. Louis, Mo.
Meola, L. K. Cleveland, O.
Mesick, R. O. Kalamazoo, Mich.
Michigan Normal Coll. Ypsilanti, Mich.
Midkiff, Frank Honolulu
Miller, W. C. Bedford, O.
Mills, T. H. Welcome, N. C.
Milner, C. F. Chapel Hill, N. C.
Mitchell, J. J. Lockport, N. Y.
Mitchell, T. W. Duluth, Minn.
Moffie, D. J., State College, Pa.
Moore, K. S. Santa Maria, Cal.
Muerman, J. C., Stillwater, Okla.
Muskingum College New Concord, Ohio
McCormac, D. Columbia, S. C.
McIntire, Geo., Michigan City, Ind.
McIsaac, J. S. Beaver Falls, Pa.
McKinley, H. S. Canton, Ohio
McMullan, D. S. Quebec, Can.
McMullen, R. F., Loudonville, O.
McRoy, Paul F. Houston, Tex.
McNabb, H. E. Albany, Ga.
National Col. of Ed., Evanston, Ill.
Neb. Teachers Coll., Kearney, Neb.
Nelson, C. W. Hayward, Cal.
Nelson, O. A. St. Cloud, Minn.
Nelson, Paul C., Menomonie, Wis.
Newman, Winifred Charleston, W. Va.
Nichols Inter. Sch., Evanston, Ill.
O'Donnell, G. H. R. Troy, N. Y.
Olander, H. T. Pittsburgh, Pa.
Palmer, W. C. Fargo, N. D.
Parizak, Liel Green Bay, Wis.
Park, Chas. B. Mt. Pleasant, Mich.
Parker, O. L. Ada, Okla.
Payne, A. L. Greeley, Colo.
Pedagogical Lib., Philadelphia, Pa.
Pellett, R. C., Kalamazoo, Mich.
Pennington, Fred, Des Moines, Ia.
Persing, Ellis C. Cleveland, O.
Peters, Rupert Kansas City, Mo.
Phila. Health Council Phila., Pa.
Powell, Mrs. J. S., Beaumont, Tex.
Powell, W. T. El Paso, Tex.
Pratt, M. W. East Moline, Ill.
Public Library Cleveland, O.
Pygman, C. H. Maywood, Ill.
Radio Transcription Co. Hollywood, Cal.
Rakestraw, Boyd B., Berkeley, Cal.
Ramseyer, L. L. Bluffton, Ohio
Reagan, C. R. Atlanta, Ga.
Reed, Paul C. Rochester, N. Y.
Reeves, Mrs. T. V. Canyon, Tex.
Reitze, A. W., Jersey City, N. J.
Remer, T. G. Chicago, Ill.
Reynolds, J. B. Lancaster, S. C.
Rickard, Nancye Miami, Fla.
Riggs, Cecil O., Waynesburg, Pa.
Riordon, H. M. Wash., D. C.
Rising, Justus Lafayette, Ind.
Ritter, Carl Tenafly, N. J.
Robbins, G. B. Graham, N. C.
Roberts, A. B. Gilson, Ill.
Roberts, G. Cuyahoga Falls, O.
Roberts, Jewell E. St. Louis, Ill.
Robinson, R. E. Highland, Mich.
Rohr, Joseph Madison, Wis.
Roosevelt Jr. H. S. San Diego, Calif.
Rothrock, Mary, Knoxville, Tenn.
Ruffer, Argra E. Kent, Ohio
Rugg, Kenneth C., Superior, Wyo.
Sams, Oscar E. Knoxville, Tenn.
Santa Monica Schools Santa Monica, Cal.
Schulte, R. F. Vincennes, Ind.
Seidel, C. F. Allentown, Pa.
Self, H. G. Burlington, N. C.
Sellers, O. E. Akron, O.
Sequoia H. S., Redwood City, Cal.
Sexton, L. J. St. Louis, Mo.
Shane, M. L. Nashville, Tenn.
Shreve, R., South Milwaukee, Wis.
Skaggs, D. A. Mesa, Ariz.
Smith, M. I. Hibbing, Minn.
Smith, Mrs. Marian, Duluth, Minn.
Snodgrass, M. H. Cincinnati, O.
South Georgia Teachers College Collegeboro, Ga.
Starnes, W. Gayle, Lexington, Ky.
State College Chico, Cal.
State Normal Univ. Normal, Ill.
State Teachers Coll. Milwaukee, Wis.
State Teachers Coll. San Diego, Cal.
State Teachers Coll. Terre Haute, Ind.
Steinhauer, M. H., Millersville, P.a
Stoeppelwerth, M. L. Indianapolis, Ind.
Stoltz, H. J. Normal, Ill.
Stooksberry, R. W. Dayton, O.
Stuart Robinson Sch., Blackey, Ky.
Swarthout, W. E. Maywood, Ill.
Swingle, Earl Los Angeles, Cal.
Sylvia, Sister M. Scranton, Pa.
Tate, George B. Dayton, Ohio
Tiemann, Ernest Pueblo, Colo.
Tighe, B. C. Fargo, N. D.
Tilton, E. B. San Diego, Cal.
Tower Hill Sch., Wilmington, Del.
Traynor, Ada M., Regina, Sask.
Trolinger, Lelia Boulder, Colo.
Troxel, R. B. Farmington, Ill.
Troyer, M. E. Washington, D. C.
Trump, J. Lloyd Chicago, Ill.
Trusal, M. E. DuBois, Pa.
Tuttle, Earle B. Teaneck, N. J.
Twogood, A. P. Ames, Ia.
Tyler, I. Keith Columbus, Ohio
Univ. of Georgia Athens, Ga.
Univ. of Hawaii (2) Honolulu
Univ. of Kansas Lawrence, Kan.
Univ. of Minn. Minneapolis, Minn.
Univ. of Redlands, Redlands, Cal.
Van Aller, H. H. Saratoga Springs, N. Y.
Van Devanter, Anne W. Orlando, Fla.
Van Loenen, C. A. Laguna Beach, Cal.
Vance, Charles A., Columbus, Ohio
Vernor, P. H. Rockford, Ill.
Waggoner, E. C. Elgin, Ill.
Wagner, Paul B. N. Syracuse, N. Y.
Wagner, William S. Montpelier, Ohio
Walker, H. H. Knoxville, Tenn.
Walton, H. L., Garden City, Kan.
Ward, Owen W., Garland, Utah
Ward, W. H. Columbia, S. C.
Wardlaw, J. C. Atlanta, Ga.
Wattenberg, Walter W. Chicago, Ill.
Weedon, Vivian Wilmette, Ill.
Welty, Clarence Bedford, Ohio
Wendt, Paul R., Minneapolis, Minn.
Wenger, Roy E. Columbus, O.
W. Tex. Teachers Coll. Canyon, Tex.
Wheeler, J. W. Statesville, N. C.
White, J. Kay Berwyn, Ill.
Whitehead, Wayne Dearborn, Mich.
Whitman, Mark Puyallup, Wash.
Whittinghill, W. W., Detroit, Mich.
Williams, Don, Minneapolis, Minn.
Williams, P. T. Albany, N. Y.
Wilson Teacher Coll. Washington, D. C.
Winchell, L. R. Vineland, N. J.
Wisner, Victor Perth Amboy, N. J.
Witt, Margaret, Johnstown, Pa.
Young, W. A. Graham, N. C.
Zabor, Elmer Cleveland, Ohio

Metropolitan N.Y. Branch

Abbott, John E. N .Y. C.
Adler, Freyda N. N. Y. C.
Amson, Emily N. Y. C.
Arnspiger, V. C. Long Island City
Atyeo, Henry C. White Plains
Barnard, Eunice F. N. Y. C.
Bashkowitz, Mrs. P. Brooklyn
Berg, Mrs. E. L. N. Y. C.
Boecker, Alexander N. Y. C.
Bowmar, Stanley N. Y. C.
Bray, J. R. N. Y. C.
Briner, George C. Maspeth
Brodshaug, Melvin N. Y. C.
Brotzman, Mrs. E. Brooklyn
Burns, Suzette Brooklyn
Chapin School N. Y. C.
Clifford, Wm. N. Y. C.
Cohen, Dr. Frances N. Y. C.
Com. on Scientific Aids., N. Y. C.
Cook Dorothy N. Y. C.
Cooper, L. C. Floral Park
Crittenden, Harold C. Armonk
Cumningham, M. D., Staten Island
Danaher, Alice N. Y. C.
Devereaux, A. E. N. Y. C.
Doane, Donald C. N. Y. C.
Donovan, Esther Garden City
Edwards, H. T. N. Y. C.
Eichel, C. G. Brooklyn
Ellis, Don Carlos Garden City
Freund, Felix N. Y. C.
Ganz, Wm. J. N. Y. C.
Garrison, Jane W. Brooklyn
Gates, G. M. Long Island City
Goldin, Myron Brooklyn
Gray, H. A. Long Island City
Greenwald, Alma Larchmont
Gutlohn, Walter O., Inc., N. Y. C.
Haight, Eric H. N. Y. C.
Hamilton, J. S. N. Y. C.
Healey, Gertrude M. N. Y. C.
Hessberg, Lena N. Y. C.
Hochheimer, Rita Brooklyn
Jenkins, John J. Bronxville
Katz, Elias N. Y. C.
Keliher, Alice N. Y. C.
Kelly, George J. N. Y. C.
Kennedy, Mary A. Brooklyn
Knowlton, D. C. N. Y. C.
Levinson, Gigi Jamaica
Lichtman, Frieda N. Y. C.
Loughran, G. A. N. Y. C.
Mathewson, F. T. White Plains
May, Anne C. N. Y. C.
McClusky, F. D. Scarborough
McKeown, M. J. N. Y. C.
Moore, E. C. Hempstead
Mulqueen, Marie A. N. Y. C.
O'Gorman, Mrs. D. N. Y. C.
Peixotto, B. C. Ozone Park
Ramsey, Grace Fisher N. Y. C.
Rauch, Celia Brooklyn
Reilly, F. J. N. Y. C.
Rockefeller Foundation N. Y. C.
Ross, Herman N. Y. C.
Rothschild, John N. Y. C.
Rubenstein, L. M. Brooklyn
Schneider, Etta N. Y. C.
Silverman, Estelle N. Y. C.
Simpson, M. L. Brooklyn

Steiner, Fredericka ..... N. Y. C.
Stolper, C. J. ..... N. Y. C.
Theobald, Jacob ..... N. Y. C.
Trace, Chas. T. ..... Brooklyn
Waldron, Vica ..... N. Y. C.
Wehberg, Hilla ..... N. Y. C.
Whitney, Harold A. ..... N. Y. C.
Williamson, Pauline ..... N. Y. C.
Wilson, John C. ..... White Plains
Wulff, Adolph Arthur ..... N. Y. C.
Young, Isabel ..... N. Y. C.
Zehrung, George ..... N. Y. C.

New England Branch

Allard, Dorothy ..... Reading, Mass.
Austin, W. Scott ..... Quincy, Mass.
Avitable, Albert South Braintree, Mass.
Bassett, Roscoe ..... Danbury, Conn.
Bickford, Gladys ..... Lynn, Mass.
Bridgham, E. T. Wallingford, Conn.
Brown, Elizabeth West Medford, Mass.
Brown, S. W. ..... Stamford, Conn.
Buckingham, B. ..... Quincy, Mass.
Canfield, B. R., Babson Pk., Mass.
Chapman, L. H., Hingham, Mass.
Childs, H. E. ..... Providence, R. I.
Christiansen, F. Wollaston, Mass.
Cook, Burton ..... New Haven, Conn.
Cooper, Mary A. N. Willbraham, Mass.
Couey, Fred ..... Storrs, Conn.
Crowley, Wm. P. ..... Everett, Mass.
Darling, W. S. Cummington, Mass.
Dion, Paul ..... Southbridge, Mass.
Dyer, Raymond ..... Clinton, Mass.
Ebner, Albert Thomaston, Conn.
Erickson, C. W. Greenfield, Mass.
Farwell, Martha, Brockton, Mass.
Finch, Hardy R. Greenwich, Conn.
Galper, A. S. ..... Salem, Mass.
Galvin, Alfarata, Rockville, Conn.
Garrity, Helen ..... Boston, Mass.
Gillis, Wm. E., East Haven, Conn.
Goodman, L. S., Springfield, Mass.
Graybill, P. J., West Haven, Conn.
Haywood, C. V., Greenwich, Conn.
Hitchcock, H. A., Elmwood, Conn.
James, Mrs. K., New Haven, Conn.
Johnson, E. R. S. Braintree, Mass.
Krasker, Abraham ..... Boston, Mass.
Lawlor, E. A. ..... Lawrence, Mass.
Lyon, L. ..... Wilton, Conn.
Lyons, J. H., Thompsonville,. Conn
Manter, Mildred E. Jamaica Plain, Mass.
March, L. S. ..... Melrose, Mass.
Mather, Kirtley, Cambridge, Mass.
McDaniel, Nettie ..... Beverly, Mass.
Moyer, Jas. A. ..... Boston, Mass.
Mulville, Claire, Greenwich, Conn.
Nangle, K. Louise, Lynn, Mass.
Neal, Garland ..... Holbrook, Mass.
Northcott, J. W. New Bedford, Mass.
O'Neil, Richard F., Boston, Mass.
Palmer, H. C. Jewett City, Conn.
Payne, N. H. Newton Center, Mass.
Pottle, A. M. ..... Lee, Me.
Pyne, Lee E. ..... Willimantic, Conn.
Riani, Alfred ..... Marlboro, Mass.
Roberts, T. E. ..... Pembroke, Mass.
Rummel, Paul ..... Boston, Mass.
Sabel, R. G. ..... Plainville, Conn.
Sawyer, E. P. ..... Orange, Mass.
Scott, Walter E., Hingham, Mass.
Smith, Donald W., Durham, N. H.
Smith, Florence West Hartford, Conn.
Smith, Howard A. ..... Quincy, Mass.
Smith, R. B. ..... Bellows Fall, Vt.
Stanley Dana Corp., Portland, Me.
Sturtevant, M. A. Shrewsbury, Mass.
Swift, Arthur F. ..... Amherst, Mass.
Tessner, Glenn ..... Worcester, Mass.
Van Dusen, E. B. ..... Quincy, Mass.
Wallace, Earle, Franklin, Mass.
Wheeler, E. F. ..... Bristol, Conn.
Willard, Addie ..... Winthrop, Mass.

Louisiana Branch

Armstrong, D. G. ..... Ruston
Atkins, R. W. ..... Athens
Avery, Wm. J. ..... Natchitoches
Barrett, Ellen T. ..... New Orleans
Behrman, H. S. ..... New Orleans
Bostick, Lucille ..... New Orleans
Capraro, Rose ..... New Orleans
Cawthon, Ardis ..... Ruston
Colton School ..... New Orleans
Cook, Mrs. Carmen ..... Ringgred
Copeland, Palma ..... Shreveport
Crayton, Ruby ..... Minden
Danner, E. L. ..... New Orleans
Delaney, J. M. ..... Pineville
Dept. Visual Aids, New Orleans
Doerr, Loretta ..... New Orleans
Durham, A. W. ..... Oakdale
Ewing, J. G. & Sons Baton Rouge and New Orleans
Foil, H. E. ..... Franklinton
Gorman, J. A. ..... Jena
Grehan, Carrie ..... New Orleans
Griffith, P. H. ..... University
Hiat, Kenneth B. ..... Lafayette
Harrison, A., Jr. ..... New Orleans
Henson, C. C. ..... New Orleans
Hinrichs, Amy ..... New Orleans
Hirsch, Joel M. ..... Alexandria
Howe, Mary H. ..... New Orleans
Hynes Pre-Voc. Sch. New Orleans
Kinman, Hester ..... Choudrant
Landry, E. J. ..... Hahnville
La. Poly. Institute ..... Ruston
Lynch, James Percy ..... Ruston
Marshall, Donald ..... New Orleans
McClendon, W. C. ..... Crowley
McDonough, No. 11 School New Orleans
McDuff, Ena ..... Chase
Moore, Ida ..... Lake Providence
Moore, Loretta ..... New Orleans
Mount, R. H. ..... Ruston
Neal, Paul J. ..... Neville
O'Neal, Bernice ..... Ruston
Robert, P. C. ..... Minden
Rodgers, Myrtle ..... Monroe
Simpson, A. B. ..... Natchitoches
Smith, Anna Greene ..... Ruston
Smith, N. L. ..... Franklinton
Sutton, R. O. ..... Ruston
Thompson, C. T. ..... Estherwood
Walker, Perry ..... New Orleans
Watson, J. W. ..... Iowa
Verner, Angeline ..... New Orleans
Wooley, J. B. ..... Lafayette
Woodard, Helen ..... Ruston

Membership—Distribution by States

Alabama (1), Arizona (1), Arkansas (0), California (32), Colorado (7), Connecticut (21), Delaware (1), Florida (10), Georgia (5), Idaho (0), Illinois (36), Indiana (10), Iowa (7), Kansas (5), Kentucky (3), Louisiana (56), Maine (2), Maryland (1), Massachusetts (43), Michigan (16), Minnesota (15), Mississippi (1), Missouri (4), Montana (0), Nebraska (5), Nevada (0), New Hampshire (1), New Jersey (14), New Mexico (0), New York (96), North Carolina (8), North Dakota (3), Ohio (47), Oklahoma (2), Oregon (3), Pennsylvania (24), Rhode Island (1), South Carolina (4), South Dakota (2), Tennessee (6), Texas (13), Utah (2), Vermont (1), Virginia (3), Washington (3), West Virginia (8), Wisconsin (11), Wyoming (1), Territory of Hawaii (3), Dist. of Columbia (9), Canada (4). **Total: 551.**

Notes from the Field

Middle West

Approximately 150 persons attended the visual aids section meeting of the Iowa State Teachers Association in Des Moines on November 7. The teachers left the meeting with the pleasant feeling of enjoying a successful program suited to their needs.

The Visual Instruction Service of Iowa State College announces that it has just experienced the greatest year of distribution in its history. They also notice a more intensive use of the visual aids distributed, as well as more thought given by teachers to their application in teaching. (These notes were furnished by H. L. Kooser, Director of Visual Instruction Service, Iowa State College, Ames, Iowa.

From Mr. K. D. Nicholson, County Superintendent of Schools for Polk County, Iowa, comes the following interesting story of the development of their visual aids project.

Polk County is composed of eighteen town and consolidated schools and sixty-four rural schools. Omitting Des Moines, the Superintendent's office tried to work out a sound visual education program. Directors and superintendents of all town schools were called to the office for a conference and demonstration of the value of the sound motion picture projector as a classroom teaching device. Schools agreed to buy one 16 mm. sound projector on a cooperative plan. The amount paid by each school depended upon the average daily attendance. In no case did it exceed $35. This participation fee entitled schools to the use of a sound projector for a half day every other week.

A WPA employee was obtained to operate the machine and take it on a circuit of the schools in the county. The schools agreed to pay the mileage at the rate of three cents, and the WPA his salary. The operator was responsible for keeping the machine oiled and cleaned, and had charge of receiving and mailing out all films. In addition he kept an attendance record at each showing and a record of the classes seeing each particular film.

A committee of teachers, representing senior high, junior high, and elementary schools, meet each semester and select the films to be used the following semester. The films are rented or borrowed for a two-week period and in all cases a special rate is given. Each circuit averages a selection of from six to eight films. At the beginning of each semester, all schools receive a bulletin listing the films that are to be shown on specific dates. A description of the film is included and recommendations for the film's use are made. Manuals are mailed whenever available and charged to the individual schools. Cost of the films for any one circuit is divided equally among the schools participating.

This program has been in operation for three years. It has proved very successful and inexpensive. A record of expenses and receipts is kept in the Superintendent's office and a statement sent to each school after three circuits. Film cost per school averages about sixty cents. Transportation for each school is fifty-three cents. This means that for $1.13 a school

can have the use of from six to eight films and the machine for one-half day every other week. Schools are encouraged to order for their own use specific films to be available on the day when the machine is in their school.

The program is not perfect. Teachers have use of the films only at the time specified. They are unable to show the films, in most instances, more than once and often the film doesn't come at the exact time that they are studying a specific unit. To educate the teachers to the program, demonstrations on proper use of films are held, and helpful books and manuals made available.

Robert Shreve reports from Milwaukee that a city movement is on foot to censor all films shown in the public schools. This is due to the fact that a film received by a junior high school from the German Railways Information office allegedly on Wagner and music turned out to be a description of Hitler enjoying Wagnerian opera. The film was shown in a Polish school and resulted in a violent demonstration by fifty students.

An interesting sidelight on the Fourth School Broadcast Conference is the report that J. Robert Miles of the Evaluation of School Broadcasts project at Ohio State University is preparing a catalog of about one thousand electrical transcriptions that are available commercially. The catalog will not only list prices and sources, but will also give an evaluation of each record.

Action pictures of Racine industries, showing the varied crafts and trades, have been prepared as vocational guidance aids in the Racine public school system, under the direction of Harrison U. Wood, Principal of the Franklin Junior High school. A group of lay citizens is cooperating with the students and school authorities in compiling this helpful information. It sounds like a good public relations program to further cement fine relationships between the school and the community.

Metropolitan Area

The New York Metropolitan Branch reports a meeting November 14 at the Central Needles Trade High School at 225 West 24th Street, New York City, for the purpose of showing primary grade teachers 16 mm. sound material in the primary field. The following films were shown "The Policeman," "An Airplane Trip," "Minor Duck in I Love to Make Music," "Bird Sanctuary," "Wake Up and Seed," "A Day at the Zoo," "In Our Pond," "Lincoln in the White House."

A great deal of discussion followed, and the meeting was considered a success by all those present. The program was under the direction of Pauline Bashkowitz, Chairman of the Program Committee, and Rita Hochheimer, Chairman of the Executive Committee. (News from the Metropolitan branch is supplied by Mrs. Esther Berg, Corresponding Secretary.)

The Nation, Our Campus

(*Concluded from page* 8)

of rich gold mining section in Black Hills—Conservation Projects, such as: Great Shoestone Dam near Yellowstone Park, National Forests, Numerous Indian Reservations.

Economic and Industrial Regions: Farming and Ranching in Wyoming and South Dakota—Mining regions, Pueblo and Rapid City.

Geographical Points of Interest: Great Plains region of South Dakota and Montana and Wyoming—Rocky Mountain region from Pueblo to Yellowstone—Pike's Peak—Estes National Park—Grand Teton National Park—Yellowstone National Park—Big Horn Mountains, Wyoming—Black Hills, South Dakota—Bad Lands, South Dakota—Rolling prairie land, Iowa—Mississippi River.

Practically all films listed in preparatory material were secured from the film library of the University of Illinois.

In summarizing the long tour program, the following points may answer some questions which may have come to the reader's mind concerning student preparation, cost of the tour, etc.

1. The long tours are open to Seniors, Juniors, Sophomores and Freshmen, with preference given to the upper classmen.

2. All students are required to make suitable preparation in order to be eligible for the tour. At the present time, the preparation required is approximately the amount of work required in the ordinary half-unit course.

3. The students are required to do a certain amount of follow-up work after making the tour. If this work is not completed satisfactorily, the student is not eligible for any of the following tours.

4. The students' names are listed in order as the preparatory work is completed, regardless of his class ranking.

5. Each instructor is responsible for certain presentations of the preparatory work and other materials to be given on the trip. This includes work in the field of history, geology, sociology, literature, economics, etc.

6. The total cost to the Board is less than eight dollars per student carried.

7. A student making all four of these tours will have traveled approximately 12,000 miles. The approximate cost to the student will average from eighteen to twenty-five dollars per trip. The total cost of the four trips to any one student will range from eighty-five to ninety-eight dollars.

It is very gratifying to the author, the instructors, and the Board of Education to see the program operating on the present basis. The ever increasing enrollment for the Saturday trips, and not only an increase in enrollment for the long tours but a greater number of students enrolling for two or more, seems to indicate public support and approval.

It is the aim of the Board to develop the long tours to the point where practically every student enrolled can make at least one of them. The author also hopes to develop the preparatory and follow-up activities to such a point that the Haw Creek Township High School can offer one-half unit of credit in Field Study that will be accepted toward graduation for the work done on each of the long tours.

Illustrate Your Experiments to the entire class with this

Spencer Science Projector

Here are but a few of the experiments which can be most effectively dramatized by projection to the entire class with this Spencer Model B Delineascope.

1. Magnetic lines of force (illustrated above)
2. Properties of magnetic fields.
   a. Oersted's Experiments
   b. Motion of a magnet in a magnetic field
3. Surface tension
   a. Soap film experiments
   b. Mercury Ameba
4. Mechanics
   a. Hooke's Law
   b. Elastic limit
5. Polarized light
   Majority of the many phenomena
6. Electrolysis
   a. Polarization at anode
   b. Crystal growth
   c. Farady Effect
7. Precipitation Experiments in Chemistry
8. Thermometer and other meter readings
9. Contours of insects, small animals, plants, etc.

Details too small for the class to see in the experiment itself, are readily observed when magnified through projection. Transparent materials can be projected in true colors. The contours of opaque materials can also be projected. When motion is present it is shown vividly on the screen.

Investigate this new and better method

Write Dept. N12 for complete information

Spencer Lens Company

MICROSCOPES
MICROTOMES
PHOTOMICROGRAPHIC EQUIPMENT

SPENCER BUFFALO U.S.A.

REFRACTOMETERS
COLORIMETERS
SPECTROMETERS
PROJECTORS

SCHOOL MADE MOTION PICTURES

By HARDY R. FINCH
Head of English
High School, Greenwich, Conn.

A LARGE and enthusiastic group of school film makers attended the Second Conference on the Educational Production of Motion Pictures, held under the joint sponsorship of the Bureau of Educational Research, and the Department of Photography of Ohio State University, and the National Council of Teachers of English, at Columbus, Ohio, on November 10 and 20. Dr. Edgar Dale of the Bureau of Educational Research was general chairman of the conference.

W. W. Charters, Director of the Bureau of Educational Research opened the conference with an address of welcome to the participants. Mrs. Helen Rand Miller, chairman of the Committee on Standards for Motion Pictures and Newspapers of the National Council of Teachers of English, presented greetings from the National Council. Your department editor summarized "The Story of Educational Film Production 1939-40." This was followed by a panel discussion on "The Function of School-Produced Films in Public Relations."

Members of the panel were: G. L. Crutcher, Louisville, Ky.; Donald Eldridge, High School, New Haven, Conn.; Godfrey Elliott, Public Schools, Oakvale, West Va.; William G. Hart, Bureau of Educational Research, Ohio State University; L. C. Larson, Extension Division, Indiana University; Charles Vance, Fourth Street Elementary School, Columbus, O.; William S. Wagner, Elementary School, Montpelier, O.; Roy Wenger, Bureau of Educational Research, Ohio State University. Among the films shown during the discussion were: *The Sentinel* (New Haven, Conn.), *Our Children Learn to Read* (Dearborn, Mich.), and *First Film* (Long Beach, Calif.)

Making a teaching film on the use of the wood lathe—Grosse Point (Mich.) Junior High School.

Floyde Brooker of the Motion Picture Project of the American Council on Education, was the first afternoon speaker. In discussing his topic, "The Educational Implications of the Curriculum Production of Motion Pictures," Mr. Brooker stated that eight films were completed in a film-making project at Denver, Colorado. Four of these were made with sound; the others were silent. Three other films were begun but not completed. The speaker described in detail how the films were taken and pointed out many of the fruitful results of the project. Selected Denver films were shown.

"The Ohio Project on Cooperative Production of Safety Films by Schools" was the next discussion topic. Dr. Edgar Dale spoke on "The Purpose and Organization of the Project." Dr. Dale suggested that persons in other fields form similar cooperative groups to work on such subjects as recreation, libraries, extra-curricular activities, and citizenship. William G. Hart presented the basic technical problems of the project and showed how they were solved. Participants in the project who discussed its problems were: Gordon P. Corbitt, Roosevelt School, Parkersburg, West Va., Godfrey Elliott, Oakvale, West Va. Schools; Richard Horn, Junior High School, Galion, Ohio; Antoinette Lowry, Bexley Elementary School, Columbus; Clyde K. Miller, High School, Dover, Ohio; Ross Stooksberry and George Tate, Board of Education, Dayton, Ohio; Charles Vance, Fourth Street Elementary School, Columbus, William S. Wagner, Montpelier, Ohio, Elementary School.

Following a paper on "Biological Film Production at Rutgers" by Earle B. Perkins, Rutgers University, the conference members attending a showing of Pare Lorentz' *The City*.

The Tuesday evening session consisted of specialized clinics on: Planing the film and writing the scenario, Photography, and Publicizing and Distribution.

At the Wednesday morning meeting, F. W. Davis, Chairman of the Department of Photography, Ohio State University, described the organization and administration of a University film production service; Dean Postle of the Ohio State School of Dentistry related his experience with the production of dental films; and Lloyd Reber of the Ohio

——HIGHEST AWARD*——

CITY OF WAX (1 reel)

A fascinating, detailed presentation of the highly organized society that is the world of the bee, where life follows a pattern incredibly perfect.

PRIVATE LIFE OF THE GANNETS (1 reel)

Beautiful and thrilling life story of that magnificent bird, the Gannet, or Solon Goose. Closeups and slow motion are employed with remarkable effectiveness in depicting this bird in all its grace and spectacular activity.

**The Academy of Arts and Sciences selected these subjects for their highest award.*

These and many other outstanding 16 mm sound films on bird and animal life have just been added to our releases.

Catalog on request

POST PICTURES CORPORATION 723 Seventh Ave. New York, N. Y.

State Photography Department gave a report on "How We Photograph Football."

Professor Justus Rising of Purdue University used the conference members as students in a demonstration of the teaching of engineering drawing by means of films. (Professor Rising's paper on "How We Make and Use Engineering Drawing Films" may be found on pages 414-16 of the December, 1940, issue of EDUCATIONAL SCREEN.) John H. Lewis of Princeton University showed a film used in the teaching of mathematics and read a paper on the production of films of this type. A handbook for school production units made by students of the Fieldston School, New York City, was presented to the conference by Charles Cook, a Fieldston instructor.

The afternoon program had five topics. The first, "Producing 16mm. Sound-on-Film" was discussed by Ross Stooksberry and George Tate of the Dayton, Ohio, Public Schools. Raymond Arn, Film Associates, Dayton, related the technical problems of 16mm. sound-on-film and demonstrated equipment used by him in sound work. "The Production of Films for Classroom Use" was the topic of Ernest LaFollette, Grosse Point Junior High School, Grosse Point, Michigan, who showed a film on the operation of a lathe. George F. Johnson, Agricultural Extension Agent, Pennsylvania State College, told how films of 4-H Club activities were taken.

"Problems Involved in Filming 16mm. Color," the closing talk of the conference, was given by Lloyd Reber. A paper on "Teacher Production of Educational Films" by Kenneth F. Space of the Harmon Foundation, was filed for printing in the proceedings of the conference.

Bound copies of the "Proceedings of the Second Conference on the Educational Production of Motion Pictures" will be available in mimeographed form at $1.25 each. Orders should be sent to the Bureau of Educational Research, Ohio State University, Columbus, Ohio.

"School-made Motion Pictures and Their Use" was one of the topics discussed at a section meeting on motion pictures at the annual meeting of the National Council of Teachers of English in Chicago on Friday, November 22. The section meeting was sponsored by the Council's Committee on Standards for Motion Pictures under the chairmanship of Mrs. Helen Rand Miller. Dr. Ernest Bernbaum of the University of

VICTOR

Makers of the world famous

ANIMATOPHONE

(most widely used school sound projector)

Now offers

THE VICTOR VISUAL EDU-GRAPH SERVICE

A service that accurately ESTIMATES YOUR VISUAL AID REQUIREMENTS

The first practical and tested method ever devised to help School Administrators to accurately determine their schools' basic Audio-Visual requirements —eliminates confusion—points way to most economical purchases — shows maximum multiple use in your schools with minimum amount of equipment.

The Victor Visual Edu-Graph Service is complimentary. Your written request will get immediate attention.

VICTOR

ANIMATOGRAPH CORPORATION

Dept. D-1, Davenport, Iowa

Distributors Throughout the World

MASTERPIECE FILM SLIDES

Color is Paramount
in Art Appreciation and Visual Education
Lightweight—Durable—Faithful in Color these 2"x2" slides represent the ultimate in teaching aids.
PRICE: Fifty cents each.
Send 15c for "MASTERS IN ART" catalog of COLOR FILM SLIDES, listing over 1500 titles.
ART EDUCATION, Inc.
35 West 34th Street New York, N. Y.

"Youth in the Market Place"
A challenging new sound slide film picturing a young man's introduction to 7 major qualities for finding oneself in a job. Should be shown to every high school and college student. Prepare them for today's World of Work. Write now to
A. GORDON BRADT, 818 Judson Ave., Evanston, Illinois.

16mm sound feature films with VOCATIONAL SETTINGS
Lucky Corrigan—Lumbering
Badge of Honor—Journalism
Symphony of Living—Music
The Healer—Medicine
I Conquer the Sea—Whaling
Rangle River (by Zane Grey) — Cattle raising
. . . Send for free catalog listing many others . . .
THE MANSE FILM LIBRARY 1521 Dana Ave. Cincinnati, Ohio

35 mm. FILM SLIDES
General Science, 11 rolls, $20.00
Principles of Physics, 7 rolls, $12.00
Principles of Chemistry, 8 rolls, $14.00
Fundamentals of Biology, 6 rolls, $13.50
Write for catalog and sample strips of typical frames.
VISUAL SCIENCES, Box 264E Suffern, New York

Leave Winter
for a
"CRUISE" ASHORE

Here is escape from winter's rigours! Here at the hotel Traymore you're enveloped with the warmth of the Gulf Stream, relaxed in the atmosphere of a "luxury liner". Not on the sea but by it. For here too are the shore's diversions — golf on summer grass greens, riding by the ocean's edge. You will come? Rates from $5 European, with meals $8.

and you can say you stayed at
***The* TRAYMORE**
ATLANTIC CITY
Bennett E. Tousley, General Manager

RELIGIOUS "All-English Talking" Film
16mm & 35mm
Available on short or long-term lease.
SUNRAY FILMS, Inc. Film Building Cleveland, Ohio

Illinois presided. The principal speaker was Dr. Edgar Dale. On the discussion panel were: Miriam B. Booth of Erie, Pa.; Godfrey Elliott, Oakvale, West Va.; Dr. Helen Clifford, Lowell Junior High School, Long Beach, Cal.; Lillian E. McNulty, Barrett Junior High School, Louisville, Ky.; Maribel Richardson, G. C. Murphy Junior High School, Atlanta, Ga.; Donald Eldridge, New Haven, Conn., Public Schools; and your department editor.

For those who are planning to make a public relations film, *Reporting Thru Movies* (400), offers excellent advice. The film, made by Godfrey M. Elliott, Oakvale High School, gives examples of particular areas in which public relations films may be used to advantage.

How to Choose a Still Camera

(*Continued from page 12*)

set at the proper focus for the object. Incidentally, the coincidence type range finder is optically more correct than the split-field type and is easier on the eyes.

View Cameras. These cameras have a ground glass permanently fixed in the back of the camera or provision for slipping in a ground glass panel when needed. Focusing is done by watching the inverted image on the ground glass, as the lens is racked back and forth, until the image is sharp. Ground-glass focusing is not as needle-sharp as focusing with a range finder, but it permits careful composing by making it possible to see the image the same size, and in much the same way, as it will appear in the final contact print.

There are several disadvantages in connection with these cameras; the image is inverted; the focusing has to be done with the lens wide open to give maximum brilliance on the ground glass and then the lens stopped down to the opening to be used in making the exposure, a procedure that slows the work; the film cannot be in the camera while focusing; focusing should be done with the camera on a tripod; the image is not visible while the exposure is being made.

Single-lens Reflex Cameras. The photographer can look into the hood with which these cameras are provided and see the image right side up and full size on a horizontal ground glass. No tripod is required for focusing with these cameras. Also, the film is in the camera while focusing because an inclined mirror reflects the image away from the film to the ground glass. When the picture is snapped, the mirror swings out of the way just before the shutter opens.

This type camera has some of the same disadvantages as the view camera in that the focusing has to be done with the lens wide open to give maximum brilliance on the ground glass and in that the image is not visible while the exposure is being made.

• AMERICAN HISTORICAL SERIES •
2 REELS EACH — 16 MM SOUND — FOR RENT
OUR BILL OF RIGHTS
OUR DECLARATION OF INDEPENDENCE
WRITE FOR FREE CATALOG
GARRISON FILMS 1600 BROADWAY NEW YORK CITY

The single-lens reflex camera has other disadvantages inherent in the reflex type. It is rather heavy and bulky. It is more complicated than the view camera and therefore more liable to get out of order. Most reflex cameras do not have a long bellows extension for copy work, found in some of the view cameras. If the single-lens reflex camera has a removable lens, and if the necessary tube extensions can be obtained or made, this difficulty can be overcome.

Double-lens Reflex Cameras. This type camera is like the single-lens reflex in that, by looking into the hood of the camera, the photographer sees the image right side up and full size on a horizontal ground glass. However, the double-lens reflex is provided with two lenses, one for taking the picture and one for viewing the image on the ground glass. The viewing lens has an unadjustable aperture as large, or even larger, than the largest aperture on the taking lens. Therefore, the image on the ground glass is always at its brightest, even though the taking lens may be set at a small aperture for the proper exposure. The image can also be seen before, during, and after the exposure.

The double-lens reflex lacks one of the advantages of the single-lens reflex in that it is not possible to judge the depth of field on the ground glass with it. In the case of the single-lens reflex, the photographer can open or close down the diaphragm of the lens and observe the depth of field on the ground glass at any particular lens aperture. It is impossible to do this with the viewing lens of the double lens reflex because of its unadjustable aperture. The double lens reflex has another disadvantage not encountered in the single-lens reflex—parallax becomes an important problem to be taken into consideration with the former at close distances.

Incidentally, these double-lens reflex cameras are now available in simple, inexpensive fixed-focus models, if desired.

It should be understood that a camera that is to accomplish a combination of the purposes listed must contain the necessary combination of features that have been described.

A final warning: do not expect to find the "ideal" camera, one that possesses all advantages and no disadvantages. There are a few cameras on the market that approach this ideal but none as yet that have attained it.

Before buying your camera, decide what types of photographic work you will most likely do, list, on the basis of the information supplied in this article, the desirable features a camera should have for these types of work, and then look for a camera of good construction and made by a reliable manufacturer that contains as many as possible of these desirable features. A comprehensive photographic catalog or directory will help considerably in your search for this camera.

MASTERPIECE!

THEATRE-on-FILM INC.
proudly presents
"JOURNEY to JERUSALEM"
by MAXWELL ANDERSON
as staged by ELMER RICE
at the National Theatre, N. Y. C.

AN OUTSTANDING EVENT IN THE HISTORY OF 16MM FILM-MAKING

A filmed stage play—featuring its original, stellar cast—presented as staged on Broadway. Especially produced to fill the long-felt need for new, original non-theatrical feature films.

It brings BROADWAY to YOU. An opportunity to see and enjoy the plays that thrill New York theatre-goers.

Film's Running Time: 90 Minutes — RCA Recording

A BOON TO EDUCATORS
STUDENTS • DRAMA-LOVERS

A magnificent film for showings in schools, colleges, churches, dramatic societies, charitable and social organizations, private homes, etc. Endorsed by eminent educators, high church dignitaries, and magazine and newspaper editors.

Arrangements can be made for Organizations not having 16MM Sound Projection Machines

AVAILABLE FOR IMMEDIATE BOOKINGS
Address All Communications to

THEATRE-on-FILM INC.
JOSEPH POLLAK, *President*
1619 Broadway Dept. E New York, N. Y.
Tel: Circle 5-7438
Territories Available for Reliable Agents

The Literature in Visual Instruction

(*Concluded from page* 20)

government, of local industry, the effect of housing on delinquency, agencies at work on crime prevention. With respect to public welfare, the group found the film "Three Counties Against Syphilis" a graphic presentation of that particular problem. These and many other activities helped these high school students to understand some of the grave problems which their generation must meet.

Use of Newer Types of Instructional Materials—(In Twelfth Yearbook, Dept. of Supervisors and Directors of Instruction of the N.E.A., 1940. Chap. XIV)—Lillian A. Lamoreaux, Director of Curriculum, Santa Barbara, Cal.

Good concrete examples of use are drawn from the experiences of that school system in cooperating with Charles Hoban and his evaluation of films study.

Social Effects of Films

A Unit on Propaganda Analysis—Fenton A. Gage—*Social Education*, 4: 484-8, November, 1940.

This helpful guide to a study of the ways in which communication agencies affect our opinions gives special attention to the role of the motion picture and radio.

The Commission on Human Relations: Its Work and Relation to the Defense of Democracy—Alice V. Keliher, New York University—*Progressive Education*, 17:497-504, November, 1940.

The production of the series of short films now distributed as the "Human Relations Series" is one of the outstanding achievements of the Progressive Education Association's Commission on Human Relations. There are over 50 subjects covering the range of human behavior from the young child in his family, to the older child and his group, the young person choosing his life work, and so on. The films are now especially significant for the defense of democracy.

To live successfully in a democracy one must be able to take responsibility, to make well thoughtout decisions, to stand on one's own feet, to cooperate in solving community problems—to have a strong personality. The overburdened, anxiety-ridden, insecure and poorly educated are the first to seek dictators who relieve them of making decisions and taking responsibility for intelligent planning and cooperation. The incidents depicted in the films can successfully be used to bring about an understanding that results in wholesome personality. The films are now available to schools, with helpful study guides and stenographic accounts of previous student discussions.

Maps

The Use of Maps in the Classroom—Arthur Carthew, Los Angeles City College—*The Business Education World*, 21:223, November, 1940.

A timely discussion of the ways in which maps found in newspapers, magazines and almanacs should be used; also the importance of the automobile road map.

The Map as An Educational Instrument—George T. Renner, Teachers College, Columbia University—*Social Education*, 4:477-82, November, 1940.

The reason why the map is given less attention in these days of sound films is not that it is less important, but that it is misunderstood. They are used more often on public buildings, at fairs and in popular exhibits for mere decorative, semi artistic rather than for educational purposes. Maps help to replace a vague concept of location, space, distance in our view of our local, state, national or international community by one that is clear, systematic and economical. We can learn to use map symbols in our mind, just as we use word symbols for thinking. Ten rules for using maps in the teaching of social studies are given.

Teacher Training

Some First Steps—W. Gayle Starnes—*Scholastic*, 37: 10-T December 16, 1940

Some sound advice "to find ways and means which will encourage teachers to utilize these (audio-visual aids) materials in such a way that their pupils will derive the maximum benefit from their use." The three steps suggested are: 1) Create in teachers and administrators a realization of the need for in-service teacher education in the use of audio-visual aids; 2) Have at least one person in the school who is thoroughly trained; 3) Hold a meeting of *all* teachers in the school; 4) Conduct a second meeting for those teachers who are interested. Care should be taken not to move too rapidly in the development of the program.

Libraries and Visual Aids

New Aids for Familiar Purposes—Mary E. Townes, Teachers College, Columbia University, N. Y.—*I.L.A. Bulletin*, 34:691-4 Dec., 1940

A review of the trends in the development of scientific aids to learning that involve the transmission of knowledge. An interestingly-written summary of ways in which the library can serve as a vitalized center for adult education through films, phonograph records, slides, filmstrips and the like.

Pictures

Pictures in a Small Library—Carl J. Gigani, Illinois State Library—*Wilson Library Bulletin*, 15:225-9 Nov., 1940

Gives helpful advice on the principles of selection, sources and techniques of mounting, labeling and filing of flat pictures.

Pictures Teach History—Clarence Stegmeir, Harvey, Ill.—*The Social Studies*, 31:298, November, 1940.

Art pictures were transferred to the walls of a shop room and converted to a frieze that depicted scenes of American history. The pictures used are colored copies of famous originals and are very accurate in details.

Equipment

Movie Projectors. *Consumers Union Reports.* 5:no.11:15 Nov. 1940

Ratings of standard 16mm. film projectors.

Commercial Motion Picture Production with 16mm Equipment—John A. Maurer—*Journal of the Society of Motion Picture Engineers*, 35:437-465, November, 1940.

Most of the commercially-made 16mm educational and business sound films are still photographed in 35mm and reduced to 16mm for projection, but the rapid technical progress made in 16mm sound recording during the past few years has stimulated direct 16mm production with very satisfying results and at astonishingly reduced cost. This paper, presented last spring at the SMPE meeting, discusses the apparatus available for direct 16mm production, the film types that are in use, the film laboratory services available, and the methods used by direct 16mm producers. Particular attention is given to the Kodachrome process as used in commercial film production. Direct 16mm recording is of special value when much of the photography has to be done away from studio facilities.

Sources of Materials

Free or Inexpensive Geographic Materials—Frederick K. Branom, Chicago Teachers College—*Chicago Schools Journal*, 22:26 Sept.-Oct., 1940

An alphabetical listing of pamphlets and other aids helpful for the teaching of geography. The criteria used by the author for inclusion were: he had examined the material and found that it contained valuable information; the material was available to teachers.

Film Information Service—a monthly bulletin listing new commercial and industrial films or selected older films for school programs. Subscription $1.00 a year. Each subscriber will be privileged to write regarding film problems. Address Film Information Service, 535 Hearst Tower Bldg., Baltimore, Md.

Filmo Visual Review—Quarterly—Bell & Howell Company—1817 Larchmont Ave., Chicago.

Bell & Howell's new 8-page quarterly publication is a newsy bulletin, which aims to serve visual educators more completely than the *Filmo Topics* department "Motion Pictures in Education" could do within its space limitations. The first issue of the new organ features an article by W. Gayle Starnes, "Looking into the Future," which discusses the role of motion pictures in education. There is a short article on the use of the film by athletic coaches, and departments entitled "Notes from the Screening Room," "For Operators Only," and "New Visual Education Tools."

Bell & Howell state that all schools and educators previously receiving *Filmo Topics* have been placed on the mailing list for *Filmo Visual Review*.

From Australia to the Argentine ...from Canada to South Africa

"It's the leader on all three important counts" —they say!

1. Finer, clearer sound
2. More even light on screen
3. Greater operating simplicity

—and it's priced with the lowest!

THE EXPERTS who have so enthusiastically "taken to" the RCA 16 mm. Sound Film Projector include experienced men and women in schools, colleges, industrial organizations, film laboratories and producing companies. They are located not only in this country, but in India, Colombia, Australia, Canada, and many others as well.

You will find, just as they have, that the RCA 16 mm. Sound Film Projector reflects all the knowledge that RCA engineers have accumulated in building sound equipment for motion picture theatres.

Sound really *lives* when you use this projector, thanks to film take-up equalizer and superb electrodynamic speaker. Pictures are more sparkling because of oversize reflector, condenser and objective lens, which provide more even light on the screen.

You will also discover new operating simplicity. Threading line, cast on projection block, greatly facilitates threading. All size reels are speedily rewound by motor. Cleaning and adjusting are extremely simple. And wear on film is greatly reduced by large 16-tooth sprockets and better film channel design.

All told, the RCA 16 mm. Sound Film Projector is *better 16 ways*—yet is priced with the lowest! Get full details without cost or obligation. Mail coupon.

Made for work with VICTOR RECORDS AND RCA VICTROLA

In Canada, RCA Victor Co., Ltd., Montreal. Trademarks "RCAVictor," "Victor" and "Victrola" Reg. U.S. Pat. Off. by RCA Mfg. Co., Inc.

Modern schools *stay* modern with RCA Tubes in their sound equipment

RCA Victor

Audio Visual Service • Educational Dept., RCA Manufacturing Co., Inc., Camden, N. J.
A Service of the Radio Corporation of America

Educational Department (E-1)
RCA Manufacturing Co., Inc.
Camden, New Jersey.

Please send me complete information concerning RCA 16 mm. Sound Film Projector.

*Name*_____

*School*_____

*Address*_____

*City*_____ *State*_____

NEW FILMS OF THE MONTH

As They Look to A Teacher Committee

Conducted by DON WHITE
In Charge of Audio-Visual Extension Service
Division of General Extension,
University System of Georgia, Atlanta

Control of Body Temperature (Erpi) 11 minutes, 16mm sound, sale price $50.00. Teacher's Guide to be furnished.

In this film laboratory demonstrations, animated diagrams, microcinematography and normal cinematography combine to give a scientific explanation of the control of body temperature in warm-blooded animals. In the first scenes men are seen in environments of widely varying temperatures. Next a recording thermometer reveals a man's temperature throughout 24 hours. Temperature chamber experiments draw a distinction between warm-blooded and cold-blooded animals. Foods are designated as the source of body heat. Human body temperature is contrasted in states of relaxation and exercise, and the effects of extreme heat and cold on the body are demonstrated. An animated diagram reveals the working of a sweat gland; the effects of low and high humidity upon body cooling through sweat evaporation are explained. Next the work of the hypothalamus is demonstrated. An analogy is here drawn between the function of a thermostat in keeping house temperature constant and that of the hypothalamus in keeping body temperature constant. Animated diagrams then reveal in detail the working of the body's control mechanisms: excessive heat causes increased heat loss and decreased heat production; cold, the opposite. The effects of fever are demonstrated, and the film ends by saying that the temperature control mechanisms of the body operate together to effect a triumph over temperature variations.

The HOLMES — only 16mm Projector with 10-tooth Sprockets
Many other exclusive features make the Holmes sound-on-film projector the eminent choice for visual education and entertainment.
It's the only machine of its class equipped with the superior Bausch & Lomb aspheric type condensers. Large diameter of sprockets makes them easier to place film around—brackets hold 1600 foot reels.
Complete mechanism housed in one case. Switch quickly changes speed for showing silent pictures.
Amplifier is attached to projector. For sound films, unnecessary to remove amplifier when running pictures in various class rooms and auditoriums.
Ask for Demonstration
Write for Catalog, Prices and nearest Dealer.
HOLMES PROJECTOR COMPANY
1813 Orchard Street
CHICAGO
16 mm Portable, Mazda or Arc Lamp.
35 mm Portable, Mazda or Arc Lamp.
35 mm Imperial for Auditoriums.
Holmes
PROJECTORS

COMMITTEE OPINION—A very good film for use in physiology and biology classes; should be valuable also in general science, hygiene, and, to a more limited extent, psychology. The film is technically excellent in every way, and the various cinematic devices in it are used to maximum advantage. It should have some value at junior high, with major effectiveness at senior high and college levels.

White Flood (Garrison) 2 reels, 16mm sound, sale price $90.00. Apply to distributor for rental rate.

An impressionistic presentation of the geological effects of the Ice Age, and a study of some glaciers which exist today. As the film opens, a brief explanation of the structure and formation of our earth is followed by an explanation of the erosive actions of atmosphere and water. Then the film enters upon its theme by explaining that another important erosive agent is ice, the "white flood." The beginning of the Ice Age is depicted; man of that era is shown, and the advance and retreat of the great ice coat over the continents. It is explained that after the Ice Age life slowly returned, and that we still live in that springtime. But all around, in the strewn boulders and the soft round hills of our earth, we may read its history. And in Alaska we may study existing glaciers to learn the laws and movements of the ice. Here there is an especially beautiful series of scenes showing views of ice-walls, glaciers, and ice-covered mountains in Alaska. The complete life history of one glacier is shown, from its birth in snowfalls high in the mountains until it breaks up into icebergs at the ocean's edge. In closing the narrator states that glacier formation is governed by delicate climatic changes and that man's life hangs in this balance between the elements and the earth.

COMMITTEE OPINION—This film should be valuable in geology classes, and of some value as well in geography, economic geography, and physical science studies. Though its specific educational application is limited, it should help to develop an appreciation of the vastness of nature. Photography and sound are good; musical background to narration is well chosen.

Boy in Court (NPA) 11 minutes, 16mm sound, sale price $25.00.

Uses a dramatization of one delinquent boy's rehabilitation to tell the story of the juvenile court and probation. As the film begins three boys are discovered attempting to steal a car. One of them, Johnny, is caught and arrested. The narrator questions his fate: will this lead to another career of prison and crime? Fortunately, for Johnny, the answer is "No," for his case is assigned to a modern juvenile court. Johnny is interviewed and tested; a trained case worker investigates his home background, "the gang," and his school situation. And so, still somewhat resentful of efforts in his behalf, Johnny is placed upon probation under the supervision of a case worker, who slowly begins to build a new world for the boy by improving his home, by leading him to attend church, to take up hobbies, and to improve in school. At the end of a year, "the gang" and all it stands for forgotten, Johnny reports to the judge again and is congratulated for his improvement.

COMMITTEE OPINION—In the opinion of the Committee, this is an excellent film for community usage, with adult audiences, in stimulating interest in, and providing information about, probation work. Although the Committee does not consider it entirely suitable for use in secondary schools because of the possibility that it may contribute undesirable ideas to youthful minds, it should be valuable for college use in connection with delinquency problems. Technical production (by Willard Pictures) is excellent in all respects.

The Policeman (Erpi) 11 minutes, 16mm sound, sale price $50.00. Teacher's Guide to be furnished.

Demonstrates to the elementary child the work of a city patrolman. As the film opens, Policeman Jim Barnes leaves his home to report for roll call at police headquarters. After assignment of duties, the work of the police all over the city is explained in a series of scenes. Next Officer Barnes is seen as he takes up his day's duties, at his assigned post on school traffic duty. Brief safety lessons for children on bicycles and on foot are presented here. After school begins, Officer Barnes returns to patrol duty and is called to climb a tree and rescue a woman's kitten. On patrol in his car, he discovers and returns home a lost boy. Finally, he chases and apprehends a reckless driver who has been reported by an alert schoolboy.

COMMITTEE OPINION—In the opinion of the Committee, which included four elementary teachers, this is a fairly good film for elementary use in connection with safety, social studies, and vocational guidance. It was noted that in one or two instances the patrolman himself failed to observe the best safety practices. The film is within the experiences of the elementary child, and it should contribute to the formation of favorable attitudes toward policemen. Photography is good; organization and sound are adequate.

Buenos Dias, Carmelita (Baptista) approx. 15 minutes, 16mm sound, sale price $50, rental $3. Teacher's Guide and preparatory lessons furnished.

Designed for use in the second year of high school Spanish instruction, this film consists of a simple story accompanied by narration in Castilian Spanish. The story tells of an attractive but rather lazy high school girl, Carmelita, who sleeps late and loiters on the way to school. Arriving long after Spanish class has begun, she is at first untruthful in excusing her tardiness, but then she repents and tells the truth.

150 words from the Kenniston Merit Lists are used in the narration, which is spoken very slowly and distinctly. Brought to especial attention in the film are the Spanish numerals, telling time in Spanish, and many idioms and descriptive terms.

COMMITTEE OPINION—In the opinion of a special reviewing committee which saw this film, it is an excellent film for second-year classes in Spanish at the high-school level. It should prove very valuable also for use in junior high classes and in college classes. The film probably would be of some value also in first-year classes, especially in college. It should prove effective in fostering and stimulating the students' desire for additional Spanish study. Photography is adequate; sound is good.

Testing the I. Q. (W&G) 16 minutes (375 feet) 16mm silent, sale price $23.00.

Produced in the Psychology Laboratory of Columbia University to demonstrate the administration of the Revised Sanford-Binet Intelligence Test and the calculation of the I. Q. After an introductory outline, a psychologist administers Form L to a five-year-old girl. The film shows only the tests passed, beginning at the four-year level and running up to the seven-year level. Titles and tables show the scoring standards. Finally, the I. Q. is calculated.

COMMITTEE OPINION—Should be of some value for college and normal school classes in psychology, educational psychology, and educational tests and measurements. The attractive child who is taking the test is at ease throughout, which sometimes is not the case in class demonstrations. The class should be given considerable preparation before the film is shown, and a discussion will be needed following the showing to clarify the points brought out in the film. Photography is fair; there is a need for more clarity in the extreme closeup shots of the tests and scoring.

Producers Named Above

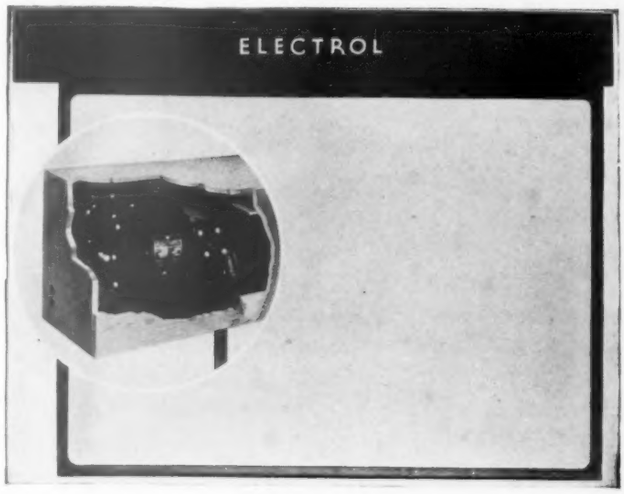
Baptista. C. O. Baptista Film Laboratory, 325 West Huron Street, Chicago.
Erpi. Erpi Classroom Films, Inc., 35-11 35th Ave., Long Island City, N. Y.
Garrison. Garrison Film Distributors, Inc., 1600 Broadway, New York, N. Y.
NPA. National Probation Association, 50 W. 50th Street, New York, N. Y.
W&G. Warden & Gilbert, Psychology Laboratory, Columbia University, New York, N. Y.

Out in Front for 31 Years

DA-LITE QUALITY

(Reg. U. S. Pat. Off.)

Has Stood the Test of Time



Down through the years, Da-Lite has continually pioneered improvements in screen surfaces and mountings, that make for still brighter pictures and easier projection. Above is shown the electrically operated *Da-Lite Electrol*. Its automatic operation simplifies projection in large class rooms and auditoriums.

The Da-Lite
CHALLENGER

The portability of the Da-Lite Challenger reduces the number of hanging screens required. It can be set up anywhere in 15 seconds. It is the only screen to have square tubing in the center rod of the tripod and the extension support. 12 sizes from 30" x 40" to 70" x 94" inclusive.

The Da-Lite line includes surfaces, sizes, and mountings to meet every requirement. All models are fully described in the 48 page Da-Lite catalog. Ask your supplier for a copy or write direct.

DA-LITE SCREEN CO., INC.
Dept. 1 ES, 2723 N. Crawford Avenue, Chicago, Illinois

FACT or FICTION!

Whether you seek

EDUCATION or ENTERTAINMENT

you will find that

the VISUAL way is the BEST way!

INCREASE your knowledge of world affairs and home affairs; enjoy the thrills of your favorite sport in season and out of season; "See America" and travel to the four corners of the world; . . . or see Hollywood's greatest stars in their greatest pictures, just as they are shown on the screens of America's theatres!

Here are some of the outstanding dramatic, musical, and comedy successes of the year, pronounced by the leading motion picture critics as

"Pictures You Must Not Miss!"

"When the Daltons Rode"
A rip-roaring picture of America's most sensational bandit-family, starring Kay Francis and Randolph Scott.

"A Little Bit of Heaven"
Gloria Jean sings her way through a glorious, human story of "Just folks."

"The Boys from Syracuse"
A Broadway hit that sold out at $5.50 a seat, now faster and funnier with Allan Jones, Martha Raye and Joe Penner.

"Sandy Is a Lady"
The most publicised lady of the screen, "Baby" Sandy, in an hilarious comedy.

"If I Had My Way"
Bing Crosby joins voices with Gloria Jean in the year's most tuneful picture.

Deanna Durbin
First Lady of the Screen, in her three latest and greatest pictures, "First Love", "It's a Date" and the magnificent "Spring Parade".

Write Immediately to

Universal's Non-Theatrical Department for full information about these full length feature attractions as well as the most complete catalog of short-subject comedies, musicals, travelogues and animated cartoons ever assembled!

WRITE FOR FREE CATALOGUE No. 17

UNIVERSAL PICTURES COMPANY, INC.

Rockefeller Center New York, N. Y.

CIRCLE 7-7100

News and

Grant for Motion Picture Research

An initial grant of $1,000 has been made by Coronet Productions, Inc., to Indiana University for educational motion picture research. Coronet Productions have offices in Chicago and a production studio at Glenview, Illinois. The results of the research will be used by Coronet as a basis for planning and producing educational motion pictures for classroom use.

The research will be supervised by staff members of Indiana University, and its purpose under the terms of the Coronet grant is to analyze the curriculum content of grades 1-12 in order to determine those topics for which motion pictures may provide a more adequate experimental background for classroom instruction. The project is to be administered by a committee composed of Dean H. L. Smith, of the University's School of Education; Professor R. E. Cavanaugh, Director of the Extension Division; Mr. L. C. Larson of the Bureau of Audio-Visual Aids and the School of Education; and two additional members of the School of Education faculty. The two other members of the committee are Professors Carl G. F. Franzen and Velorus Martz.

University professors will begin work immediately on four studies recommended by the local committee and accepted by Coronet Productions for providing information which their company must possess in order to develop plans for a systematic program of educational film production. Professor W. W. Wright will supervise an elementary grade study designed to identify topics included in grades 1-6 which may be presented successfully by educational motion pictures. A project in the social studies area for the purpose of ascertaining which social science situations are taught most often in grades 7-12 inclusive will be directed by Prof. I. O. Foster. Professor Melvin S. Lewis and Mr. John H. Dillon will supervise a study in which it is planned to determine the basic understandings and skills that are considered most important in the field of business education. Dr. Karl Bookwalter will supervise a study designed to identify, within the area of group games, folk dancing and fundamental rhythms, the activities which are most frequently used in each grade of the elementary and secondary schools.

Experiment to Revive Old Photoplays

A nation-wide experiment to determine the possibility of substituting older "A" pictures for current "B" pictures and of using recommended older theatrical films for a planned series of students' matinees, around which curriculum units in photoplay discrimination will be built, will be tried during the academic year 1940-41 under the auspices of the motion-picture committee of the N. E. A. Department of Secondary Teachers.

School authorities, in co-operation with theatre managers, will select ten photoplays to be shown during the school year on one afternoon or one Saturday morning each month. The films thus revived will serve as the basis of a new course in "Types of the Photoplay." The experiment is under the supervision of Dr.

Notes

William Lewin, of the Weequahic High School at Newark, in cooperation with Josephine Allensworth of Memphis, Tennessee, chairman of the Departmental Committee on school-and-theatre cooperation.

Films for the series will be selected from a recommended list of 76 photoplays. Among them are such films as: Victoria the Great, Snow White, Abe Lincoln in Illinois, Quality Street, Mutiny on the Bounty, A Tale of Two Cities, Romeo and Juliet, Pygmalion, Goodbye Mr Chips, Heidi, Stanley and Livingstone, Young Mr. Lincoln, Wells Fargo, The Buccaneer, Les Miserables, Tom Sawyer, A Midsummer Night's Dream, The Life of Emile Zola, Robin Hood, etc. Where suitable arrangements cannot be made with a theatre, it is planned to show 16-millimeter versions of some of these photoplays in classrooms and school auditoriums.

Educators interested in the experiment should write to Mr. Lewin for complete information and the list of recommended films.

School Broadcast Conference

In Chicago, December 4, 5 and 6 the School Broadcast Conference held its fourth annual meeting, with Harold W. Kent of the Radio Council of the Chicago Board of Education acting as chairman. Purpose of the three-day conference was to provide "a meeting place for educators, broadcasters, and directors of radio in education who are putting the programs on the air and for all those interested in the utilization of radio programs," as well as to provide "a laboratory for the nation where we may note the development and demonstration of the use of radio in education."

Speakers at the general sessions included James R. Angell of NBC, and Gladstone Murray of Canadian Broadcasting Corp. Closing session of the conference featured a panel discussion on "Methods by Which Radio Implements Democracy" with the following participating: Chairman, C. A. Siepmann, Harvard University; Lyman Bryson, Chairman, Adult Education Board, CBS, George V. Denny Jr., Moderator, America's Town Meeting, NBC; and Raymond Gram Swing, News Commentator, Mutual.

Classroom demonstrations on the utilization of various types of radio programs filled most of the daily sessions. Many of the demonstrations were presented by an actual class group from the schools of Chicago and suburbs. Acting as chairman at these "laboratory" sessions were: Clifton M. Utley, Director, Chicago Council on Foreign Relations; Wilbur Beauchamp, University of Chicago; Dudley Crafts Watson, Chicago Art Institute; Agnes Adams, National College of Education; Donald Cawelti, Winnetka Public Schools; Elizabeth Wells Robertson, Art Director, Chicago Public Schools, and Gerhart Wiebe, Ohio State University.

Several afternoon meetings of the Conference were devoted to work-study groups considering these phases of radio in education: Transcribed radio programs, radio in the activity program, elementary school radio chairman, radio writing (professional clinic), a central

"Early Settlers of New England"

1 of 51 Instructional Sound Films on Social Science

What it does: **Reinacts the lot of Salem's hardy pioneers about 1626. Types of people; the proximity of their bark wigwams and dugouts to the seashore; their dependence upon sea food and corn for food; the need for mutual assistance; division of labor; care of the sick; problems of crop cultivation; relationships with England; and the background beginnings of American democracy are portrayed.**

Scope of use: **From the intermediate grade level upward. 1. In ELEMENTARY SOCIAL STUDIES and AMERICAN HISTORY courses to develop an understanding and appreciation of the conditions through which the American colonists lived. 2. In SOCIOLOGY and ECONOMICS instruction to provide a means of contrast with today's social and economic order. 3. In HOME ECONOMICS and HOME MAKING courses to depict the basis of early American home life and family relationships. 4. In AMERICANIZATION classes and GENERAL ADULT EDUCATION to inculcate a wholesome regard for the American heritage.**

Instructional Sound Films for use in:

SOCIAL SCIENCE	51 films	PHYSICS	12 films
BIOLOGICAL SCIENCE	13 films	CHEMISTRY	6 films
PLANT LIFE	9 films	ART	6 films
ANIMAL LIFE	28 films	MUSIC	5 films
ASTRONOMY	4 films	CHILD PSYCHOLOGY	13 films
GEOLOGY	9 films	TRACK and FIELD ATHLETICS	4 films

Erpi Classroom Films Inc.

ERPI CLASSROOM FILMS INC. ES 1-41
35-11 Thirty-fifth Avenue, Long Island City, N. Y.

Gentlemen: Please send me descriptive material on your films including the Integration Chart which shows graphically the extent to which each film correlates with different courses.

Name _____

Position _____

Address _____

16 MM Sound
FILMS For HISTORY CLASSES

		Rental
Causes and Immediate Effects of the First World War	2 reels	$4.00
Highlights of Lincoln's Career	1 reel	2.00
Mr. President	1 reel	2.00
Puritans of Mass. Colony	2 reels	4.00
Our Constitution	2 reels	4.00
Our Monroe Doctrine	2 reels	4.00
Seeds of the Constitution (Albany Plan of 1754)	1 reel	2.00
Story of Our Flag	1 reel	2.00

Write for complete list of educational films and Catalog of entertainment subjects.

AUDIO-FILM LIBRARIES
661 Bloomfield Ave. Bloomfield, N. J.

✓ *As the January number of EDUCATIONAL SCREEN goes to press we have one 16mm sound print of*

ABRAHAM LINCOLN

starring Walter Huston (running time 90 minutes) open for the entire month of February at a rental of $20 per showing. The print will be rented to schools which are overnight from Chicago by air or railway express. Exhibitors pay express both ways. In applying for the film please specify hour of showing and give us as many alternate dates as possible. Rentals this year after March 1 will be $15.00.

SEND FOR OUR 1941 CATALOG

INTERNATIONAL FILM BUREAU
59 East Van Buren Street Chicago, Illinois

HOW THIS GENERATION CAN IMPROVE THE NEXT

Visualized Lecture Series

providing new light on Modern Race Decline and Means for Race Betterment.

Developed from field studies among 14 primitive races in different parts of the world. The data are available in 8 illustrated lectures in either film strips, 2 x 2 glass slides, or standard glass slides, with descriptive manuals and an illustrated outline.

1. Sketch of primitive races studied
2. How primitive races have prevented tooth decay
3. How faces of primitives were more beautiful before than after modernization.
4. Facial beauty lost in one generation and greater injury to later-born children
5. Animal defects from foods of parents and mutual responsibility of both parents
6. Light from primitive races on how mentally backward and delinquents can be produced
7. Special foods of primitives for parents-to-be and race regeneration by obeying nature's laws of life
8. American Indians—primitive, semi-primitive and modernized

FOR DETAILS WITH DESCRIPTIVE LITERATURE WRITE:

Dr. Weston A. Price, Dental Research Laboratories
8926 Euclid Avenue, Cleveland, Ohio

CHILD HEALTH
Training and Character Building Films
1 reel each, 16 mm Silent or Sound, 8 mm Silent
BEFORE BABY COMES, BABY'S FIRST YEAR, GROWING UP, LIFE OF A HEALTHY CHILD, THE ROAD TO HEALTH AND HAPPINESS
Authentic educational subjects, prepared in collaboration with leading health authorities.
For Sale or Rent
HEALTH FILM SERVICE First Nat'l Bank Bldg. Salem, Oregon

RADIO-MAT SLIDE CO. NEW YORK
TALK from your screen WITH your quickly TYPEWRITTEN MESSAGES
50 RADIO-MATS $1.50
White, Amber or Green.
Accept no substitute.
IN THE STATIONERY OF THE SCREEN

MAKE YOUR OWN
TYPEWRITER SLIDES
For Screen Projection
USE RADIO MATS
on sale by Theatre Supply Dealers
Write for Free Sample
RADIO-MAT SLIDE CO., Inc.
1819 Broadway, Dept. V, New York City

radio workshop, radio production (professional clinic), in-school workshops, evaluation-utilization, occupational program, parent-teachers association, teacher training, the safety program, and foreign language.

The Conference was significant for the high degree of cooperation between the production and the utilization ends of radio in education. There was much practical value in the classroom demonstrations, most of which allowed time for discussion and questions afterwards.

N.Y.U. Film Library

A non-profit film rental library has been established by New York University, Washington Square, New York City, to distribute educational motion pictures to schools and educational groups. Beginning with a nucleus of the fifty-five 16mm. films in the Human Relations Series, and the films produced by the Educational Film Institute—"The Children Must Learn," "And So They Live," and "Valley Town"—the library will add other films, selected particularly for their timeliness and technical excellence. The venture will be managed by a university staff committee headed by Professor Herbert B. Dorau. Alice Keliher, now on the faculty of N.Y.U., is one of the committee.

More Cooperative Film Libraries Established

Every month brings news of the inauguration of cooperative film library enterprises throughout the country. State Teachers Colleges at Ada and Durant, Oklahoma, are sponsoring such projects to increase the effectiveness of their services to surrounding schools and communities. Teacher training in the use of visual aids in the classroom is to be emphasized also. Dr. O. L. Parker will have charge of the library at Ada, and Dr. Ralph J. Shaw at Durant.

Use of Modern Art Museum Programs Increasing

Approximately 325 colleges, schools and other educational and cultural groups are now renting films from the Museum of Modern Art Film Library in New York City. These films cannot be used for money-making purposes, nor for benefits. Most requests come from the English, foreign language, sociology, and writing departments of educational institutions.

Eight series of films are now available: "A Short Survey of the Film in America"; "Some Memorable American Films, 1896-1935." "The Swedish Film";

Latest NEWS REELS

Available in 16mm Sound or Silent
"News Parade of 1940"
"News Thrills of 1940"
"Super Thrills in News"
For further information write
LEWIS FILM SERVICE
105 East First Wichita, Kansas

20 READY MADE 2x2 SLIDES $1
Unusual scenic travel and pictorial views—full **double 35mm size,** sharp and clear—mounted—ready to show in any standard projector. 20 for $1. 40 for $2. All different. **List of other subjects sent with each order.**
ART SLIDE CO., Sippo Lake S-1, Canton, Ohio

"Post-War American Films"; "The Film in Germany and the Film in France"; "The Work of D. W. Griffith, 1907-1924;" "Non Fiction Films;" "The Russian Film." From five to eight programs of approximately two hours length each, constitute each series. Patrons of the service must book the films by series of programs.

Series of Local Conferences

Dr. John Hollinger of the Department of Visualization of the Pittsburgh city schools, and Herbert T. Olander, Instructor in Audio-Visual Aids at the University of Pittsburgh, have arranged four Saturday morning conferences on audio-visual aids, designed largely for teachers and administrators in the local area. The first conference was held January 18th and had as its theme "The Administration of a Visual Aids Program." On February 15th "Visual Aids in Safety Education" was discussed. The third conference on March 15th, will be devoted to "Aids in the Teaching of Science," and the final one, on April 26th, to "The Library in Relation to Visual Aids."

School Recordings Evaluated

The evaluation of educational recordings has been undertaken by the Association of School Film Libraries in cooperation with Dr. L. Keith Tyler of the Bureau of Educational Research of Ohio State University. The evaluations will be made available, in catalog form, to members and subscribers of the Association. A pamphlet, entitled "Educational Recordings for Classroom Use," containing titles of about 375 recordings for school use, has been prepared as a first step in the project. It may be obtained for fifty cents from the Association's headquarters at 9 Rockefeller Plaza, New York City.

Motion Pictures and Defense Activities

Dr. Leo Rosten, former professor of Economics at the University of Chicago, has been appointed Chief of the Motion Picture Section in the Division of Information of the National Defense Commission, with Hollywood as his headquarters. His duties will be to assist producers in the production of defense pictures, and in the selection of picture material utilizing defense activities. Just previous to this appointment, Mr. Rosten had been making a sociological study of the film industry, under grants from the Carnegie and Rockefeller Foundations, results of which will be published soon.

NEW RELEASES
in 16 mm. Sound Film of
OUTSTANDING FEATURES

• • • • •

MEN ARE NOT GODS
Featuring Miriam Hopkins as the impulsive secretary to a dramatic critic. She alters one of her employer's harsh reviews with surprising results. With Gertrude Lawrence.
9 Reels

★

KNIGHT WITHOUT ARMOR
A thrilling war story of Countess Alexandra, portrayed by Marlene Dietrich, as the lady in distress and Robert Donat as the modern-day knight who came to her rescue.
11 Reels

★

THE MAN WHO COULD WORK MIRACLES
H. G. Wells' comedy of a timid clerk who turned into a man of might and miracles. Starring Roland Young.
9 Reels

★

The RETURN of the SCARLET PIMPERNEL
Starring Barry Barnes and Sophie Stewart. 10 Reels

★

MURDER ON DIAMOND ROW
Based on one of Edgar Wallace's greatest detective novels, featuring Edmund Lowe. 8 Reels

★

THE GAIETY GIRLS
The happy story of a merry millionaire and a gay girl. Starring Patricia Ellis and Jack Hulbert. 8 Reels

★

The PRIVATE LIFE of DON JUAN
Douglas Fairbanks in one of his typical swash-buckling, daredevil roles, replete with vigorous swordplay and breath-taking stunts. Stars Merle Oberon, Binnie Barnes.
10 Reels

Visit our Booth No. H-12 at the A.A.S.A. Convention, Atlantic City, N. J.

ENTERTAINMENT 16MM SOUND ON FILM EDUCATIONAL

Send for catalog of 2000 Educational and Entertainment subjects — for rent or sale.

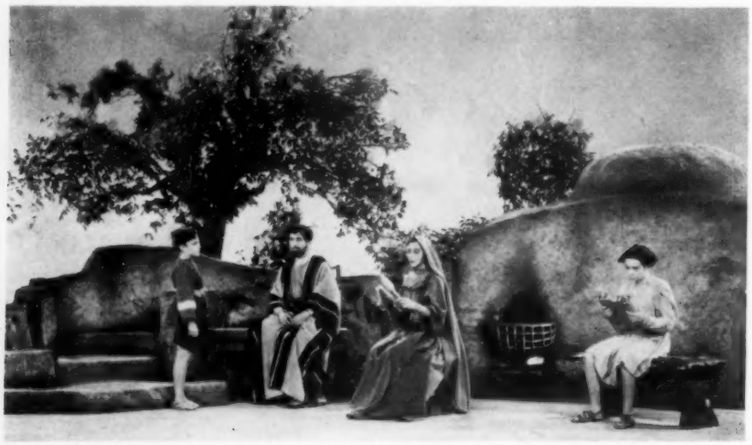
WALTER O. GUTLOHN, Inc.
35 West 45th Street Dept. E-1 New York, N. Y.

Current Film News

New Company to Film Plays in 16mm

Theatre-on-Film, Inc., has been formed recently by Joseph Pollak, to screen outstanding Broadway plays in their entirety exactly as they are originally produced and directed, with their original casts, settings, and costumes, and to make them available for educational and non-theatrical showings. Cities and towns throughout the country will now see and hear the original actors in great plays through the medium of 16mm films. Heretofore, these plays have reached only a very small percentage of the people in the larger cities where road companies have played. Beyond these few cities visited by road companies, the vast audiences throughout the nation have not been permitted so much as a glimpse of a stage play.

With their productions, Theatre-on-Film, Inc., will perpetuate on film the great art of the living drama. Its aim is to enrich the world by creating a permanent library of great plays comparable to the existing store of recorded great music, fine literature, and the masterpieces of art.



A scene from the film "Journey to Jerusalem"

The company's program for the coming season will consist of four to six productions, each made in accordance with the highest standards of theatre technique. The first production, Maxwell Anderson's *The Journey to Jerusalem*, has been completed. This play was selected by Theatre-on-Film as its initial production because of its individual and particular fitness for the cultural, religious and social fields. It was hailed by the New York critics and the public as a dramatic masterpiece. It is a moving story of the journey of the Boy Jesus to Jerusalem, and the revelation to him by a Zealot from the hills that he was the Messiah, and that it involved suffering and death. The film runs for 100 minutes.

Offices have meen established at 729 Seventh avenue in New York. The organization is headed by Mr. Pollak whose associate in this new enterprise is Emil Christian Jensen.

■ Films Incorporated, 330 West 42nd Street, New York City, makes the following announcement:

World in Flames—a full length documentary feature, picturizing world events of the past ten years leading up to the present crisis—will shortly be available in 16mm sound form. Of this film The United Parents Association of New York City, Inc., says: "The picture is an excellent historical document portraying actual scenes during the past ten years that lead up to this world catastrophe. It is very pertinent that our children view this film and learn to know how this modern madness came about." To this statement are added the recommendations of President Roosevelt, Wendell L. Willkie, Secretary of War Stimson, Secretary of Navy Knox and many other famous American leaders who urge that every American see this enlightening film.

This vivid historical chronicle of the years 1929 to 1940, produced by Paramount, was created because the editors felt the need of making the story of our times more clearly understandable to the people who are the actors in the drama. In the commentary dedicated to "free people" they have shown how the world depression fathered the drive to dictatorships; how the dictatorships thrived on the world's weakened democracy; and finally how the revitalized tide of democratic faith has begun to fight back. Complete description and rental information can be secured from Films Incorporated.

Schools wishing to conduct programs on History, Democracy, National Defense and Patriotism will find a new listing published by Films Incorporated entitled "Americana Films," extremely helpful. This leaflet will be furnished upon request to Films Incorporated.

■ Garrison Films, Inc., 1600 Broadway, New York City, offer the following new films for rental or sale:

Sunk by Submarine—1 reel, 16mm sound. A documentary record of the actual conduct of submarine warfare as compiled from World War I scenes and the years following. It shows submarines, crews, preparation for attack, attack itself and victimized ships.

Toys from Odds and Ends—1 reel, 16mm silent. Subject No. 7 in the series of Handicraft Teaching Films produced in cooperation with the Universal School of Handicrafts.

Lungs—1 reel, 16mm silent—Produced by Techfilm. This subject portrays the nature, structure and function of the lungs.

Our Bill of Rights; Our Declaration of Independence—two films in the American historical series, produced by Academic Films.

■ Scholastic Coach Magazine, 220 East 42nd Street, New York City, has produced a 16mm moving picture analysis of volleyball techniques and fundamentals, with the approval of the Volley Ball Sub-Committee of the National Section on Women's Athletics of the American Association for Health, Physical Education and Recreation. Josephine Burke, a member of the Sub-Committee, took personal charge of the direction, and students of the Department of Physical Education at Hunter College (New York) were the demonstrators.

Techniques in Volley Ball for Girls—1 reel, silent—is the title of the film. The game is thoroughly covered under these headings: Serves — Underhand, Overhead, Assistant; Handling the Ball—Low, Chest High, High; Taking the Speed out of the Ball; Setting Up the Ball for a Teammate; Playing the Ball Off the Net; The Smash or Kill; Blocking the Ball; and Team Play. The film employs both normal speed and slow motion photography to solve the problems of modern volleyball technique and strategy. As an aid to coaching the value of these slow motion scenes can hardly be overestimated. (Rental, $2.00 per day, plus 50c handling charge.)

■ American Institute of Baking, 9 Rockefeller Plaza, New York City, is arranging showings of a new motion picture, available free to schools, parents, civic clubs, consumers, and bakers, entitled:

Give Us This Day . . . The Story of Bread—30 minutes, 16mm. sound—replete with educational information about one of our most important foods. The history of bread is portrayed, with scenes of ancient Egypt, Greece, Rome, the Middle Ages, the French Revolution. The film depicts how bread was made in grandmothers' day, and how it is prepared today in modern sanitary bakeries, from the mixing of the flour to wrapping of the loaves. The composition and food value of bread, and its place in the daily diet are explained.

(*Concluded on page* 40)

Ampro Sound Projectors

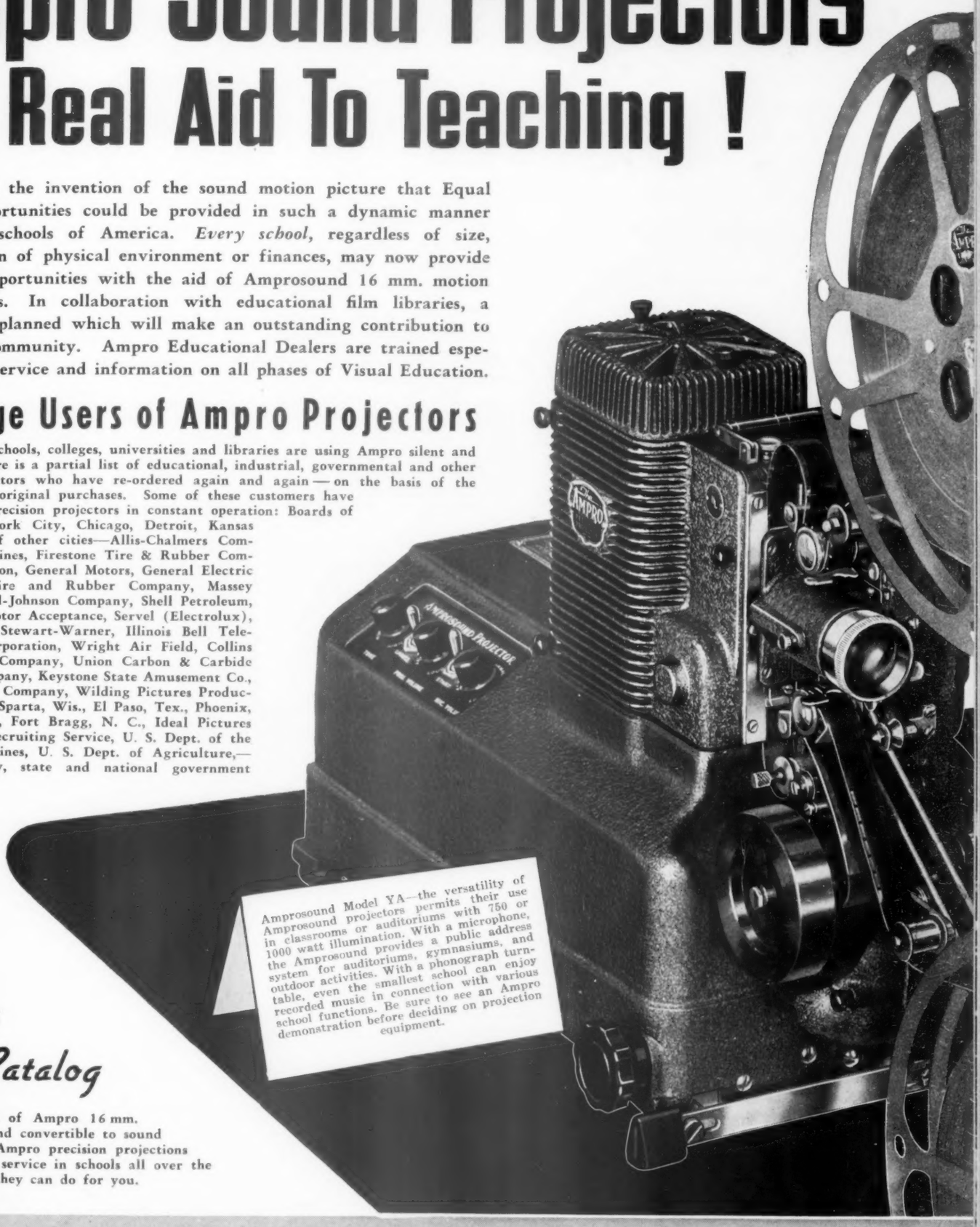
..A Real Aid To Teaching !

was not until the invention of the sound motion picture that Equal cational Opportunities could be provided in such a dynamic manner oughout the schools of America. *Every school*, regardless of size, tion, limitation of physical environment or finances, may now provide al learning opportunities with the aid of Amprosound 16 mm. motion ture projectors. In collaboration with educational film libraries, a gram may be planned which will make an outstanding contribution to school and community. Ampro Educational Dealers are trained espe- ly to provide service and information on all phases of Visual Education.

me Large Users of Ampro Projectors

y, thousands of schools, colleges, universities and libraries are using Ampro silent and d projectors. Here is a partial list of educational, industrial, governmental and other of Ampro projectors who have re-ordered again and again — on the basis of the rmance of their original purchases. Some of these customers have dreds of Ampro precision projectors in constant operation: Boards of cation in New York City, Chicago, Detroit, Kansas and hundreds of other cities—Allis-Chalmers Com- , American Air Lines, Firestone Tire & Rubber Com- , Frigidaire Division, General Motors, General Electric pany, General Tire and Rubber Company, Massey is Company, Mead-Johnson Company, Shell Petroleum, Tire, General Motor Acceptance, Servel (Electrolux), user-Busch, Inc. Stewart-Warner, Illinois Bell Tele- e, Dictaphone Corporation, Wright Air Field, Collins Aikman, Barrett Company, Union Carbon & Carbide Kraft Cheese Company, Keystone State Amusement Co., Handy, Walgreen Company, Wilding Pictures Produc- C.C.C. Camps in Sparta, Wis., El Paso, Tex., Phoenix, , Columbus, Ohio, Fort Bragg, N. C., Ideal Pictures n., U. S. Navy Recruiting Service, U. S. Dept. of the ior, Bureau of Mines, U. S. Dept. of Agriculture,— many other city, state and national government rtments.

re to see the te Ampro Dis- Booths J 45-47- the Exhibit of American Asso- n of School Ad- rators, Nation- ucation Associa- Atlantic City, ry 22-27, 1941.



Amprosound Model YA—the versatility of Amprosound projectors permits their use in classrooms or auditoriums with 750 or 1000 watt illumination. With a microphone, the Amprosound provides a public address system for auditoriums, gymnasiums, and outdoor activities. With a phonograph turntable, even the smallest school can enjoy recorded music in connection with various school functions. Be sure to see an Ampro demonstration before deciding on projection equipment.

end for

mpro Catalog

ing complete line of Ampro 16 mm. d-on-film, silent, and convertible to sound ls. Thousands of Ampro precision projections rendering splendid service in schools all over the d. Find out what they can do for you.

AMPRO

PRECISION CINE EQUIPMENT

(ES141

AMPRO CORPORATION, 2839 N. Western Ave., Chicago, Ill.

Please send me new Ampro Catalog. I am particularly interested in
- ☐ Ampro 16mm. Silent and Convertible to Sound Projectors.
- ☐ New Amprosound 16mm. Projectors.

Name .....

Address .....

City ..... State .....

■ Castle Films, Inc., 30 Rockefeller Plaza, New York City, announce the release in 16mm and 8mm of a notable motion picture, replete with visual aid possibilities for teachers of many courses, under the title:

The Third Inauguration of Franklin D. Roosevelt—tracing the career of the President from his earliest entry into public life as assistant secretary of the navy in 1917 right up to the present. While the movie may be called a screen-biography of a man, it goes beyond even that in reflecting that man's influence upon the changing American scene. It is, in fact, a movie record of a man and of an era.

Following his service with Secretary Daniels in the Navy Department, Mr. Roosevelt is shown as the defeated candidate for vice-president with Governor Cox heading the ticket. Retiring Governor Al Smith then turns over affairs of the state of New York to the man whom he had groomed as his successor at Albany. In turn, Governor Roosevelt nominates Mr. Smith as his party's candidate for President at the Houston, Texas, convention.

The movie shows how national and world economic conditions in 1932 contributed to Mr. Roosevelt's first election. It proceeds to re-live the experimental measures that were taken to remedy these conditions, including NRA parades, WPA projects and AAA efforts. The Supreme court and reorganization incidents are reflected, and the part played in the President's overwhelming landslide re-election in 1936. The Executive's sphere begins to widen as international affairs direct attention to China where the "Panay" is attacked by Japan; to Buenos Aires where the President personally appeals for Western Hemisphere solidarity, and to London and the war-torn countries of Europe. American defense begins to loom large, and the President's role in this situation is fully pictured. He is shown inspecting arsenals, airports, and navy yards as another election year rolls around. Following the nomination of Willkie, and despite warm opposition even within his own party to a third term, he is re-nominated and re-elected.

Throughout the reel, the American scene is shown as affected by the life and acts of one man. It concludes with a summarization of what the next four years holds for both the Executive and the country. Among these questions are aid to Britain; the Far East situation; two-ocean navy; military training and armament for the biggest peace-time army; a strengthened air force; unemployment; relief; the farmer; foreign markets and financial re-arrangements.

As an historic document, "The Third Inauguration of Franklin D. Roosevelt" is of great importance and permanent value. In spite of unusual problems in its assembly and editing, this film is available at all photo supply dealers at the usual low Castle prices.

Presidential Inauguration (Photo by Underwood & Underwood)

■ The DeVry Corporation, 1111 Armitage Avenue, Chicago, reports the following additions to their rapidly growing 16mm sound Educational Film Library:

Chinook's Children—in which Almiral Byrd's famous lead dog plays the important role.

South America—depicting the activities of the entire continent.

Palestine—describing the old and new Holy Land.

A copy of DeVry's latest Film Catalog will be sent free upon request.

■ Nu-Art Films, Inc., 145 West 45th Street, New York City, are the exclusive distributors of a number of very unusual single-reel subjects.

Oddities in the Law—presents the idiosyncracies of the traffic laws of several states. For example, in Milwaukee, a vehicle can park only two hours, unless it is hitched to a horse.

Life Cycle of the White or Cabbage Butterfly—is a scientifically valuable exposition of the life cycle of this insect which is found in the country gardens and truck patches of the United States and Europe. Particularly interesting are the closeup shots showing the insect's voracious consumption of living plants.

■ The March of Time, 369 Lexington Avenue, New York City, has prepared a Study Guide to the current March of Time film, entitled:

Arms and the Men—U.S.A.—showing the complete story of the draft—how the men live and train—and many other phases of the nation's huge defense program. The Study Guide has been issued to assist teachers of current events and history classes who wish to use the film, after it is seen at the local theatre, as a basis for classroom discussion. The Guide contains quiz questions and answers based on the film, bibliography of reference material for further study, and a work plan. It may be obtained free from local theatre managers, or by writing to The Study Guide, March of Time.

■ Post Pictures Corporation, 723 Seventh Ave., New York City, has added to its releases a series of unusually interesting 16 mm short subjects on bird and animal life. Outstanding among them are:

The Private Life of the Gannets—1 reel, sound—Life story of these remarkable birds.

City of Wax—1 reel, sound—a fascinating study of the bee world.

(The above two subjects received the highest award of the Academy of Arts and Sciences.)

We Live in Two Worlds—1 reel, sound—Narration by J. B. Priestley. A compelling argument for better understanding between nations and a forceful plea for peace.

Born to Die—1 reel, sound—Strange dwellers of the sea bottom and their life evolution.

Return of the Buffalo—1 reel, sound—Story of the buffalo before and after the coming of the white man.

■ Walter O. Gutlohn, Inc., 35 West 45th Street, New York City, have added many feature pictures to their library, namely:

Men Are Not Gods—Miriam Hopkins and Gertrude Lawrence; *The Return of the Scarlet Pimpernel* — Barry Barnes and Sophie Stewart; *Murder on Diamond Row*—Edgar Wallace's detective novel, starring Edmund Lowe; H. G. Wells' comedy *The Man Who Could Work Miracles*—Roland Young and Ralph Richardson; *The Gaiety Girls*—Jack Hulbert and Patricia Ellis; *Knight without Armor*—Marlene Dietrich and Robert Donat; *The Private Life of Don Juan*—Douglas Fairbanks and Merle Oberon; *I Stand Condemned*—Harry Baur, Laurence Olivier and Penelope Dudley-Ward.

■ The International Film Bureau, 59 East Van Buren Street, Chicago, has just published its 1941 Catalog of 16mm and 35mm rental films for entertainment and education, which lists carefully selected films in the fields of Art, Geography, English, History, Economics and Government and Sports. An impressive list of French features (subtitles in English) is included, as well as a series of short French Teaching Films, and films in German and Spanish.

Newly added also to the Bureau's library of outstanding feature films are the Alexander Korda productions of *Private Life of Henry VIII, The Ghost Goes West*, H. G. Wells' *Things to Come*, Kipling's *Elephant Boy, Rembrandt, The Scarlet Pimpernel*, and *Catherine The Great, The Count of Monte Cristo, Last of the Mohicans*, and several others of recognized merit, are also listed.

In and For the Classroom

(*Concluded from page* 19)

with the classroom expanded to include the whole community for sensory contacts in a number of experience realms.

Classes Visit Weather Station

The problem, "Weather and Climate," is dealt with in some form or other in practically every grade of the public school. This consideration is appropriate because of the importance of the effects of weather and climate on our lives and activities. This unit provides numerous occasions for expanding the classroom beyond the four walls of the building. Generally speaking the items considered include the measurement of temperature, radiant energy, forms of precipitation, types of clouds, why the wind blows, the barometer and air pressure, storms, high and low pressure areas, weather maps, and weather forecasts. Food, clothing, shelter, communication, and transportation are all seriously conditioned by the influences of weather and climate. Practically every one of the topics mentioned might be made the occasion for trips outside the classroom for definite sensory experiences, but perhaps the matter of weather forecasting is the most appropriate for such activities because it embodies all the others, and requires daily excursions for record taking. A series of consecutive daily readings provide the data for weather forecasts. Taking the readings is not difficult, but the correct interpretation of the data presents a challenge to the forecaster. His predictions pitted against the actual weather occurrences are a test of his thorough mastery of forecasting techniques.

Classes can set up their own "weather stations" with only a limited number of instruments and charts. However if a weather station is conveniently at hand, a few trips to it for study under the direction of the teacher or the weather station supervisor will give concreteness to the classroom material, assist in clarifying concepts, and promote a better understanding of the principles underlying the phenomena of weather and climate.

The accompanying picture indicates a demonstration of weather forecasting by the "weather man" at his station. The data sheet presents the records, together with the interpretation in the form of the weather forecast for the day.

Weather Observations

Time of Reading—8 AM *Date*—Nov. 28-40

Temperature *Hourly recording* (past 24 hours)

Temperature at reading	22°				
Maximum for past 24 hrs.	33°	8 AM	33°	10 PM	28°
Minimum for past 24 hrs.	22°	10 AM	32°	12 Md.	28°
Highest recorded for mo.	67°	12 Noon	30°	2 AM	26°
Date recorded	11-4-40	2 PM	29°	4 AM	24°
Lowest recorded for mo.	22°	4 PM	29°	6 AM	22°
Date recorded	11-27-40	6 PM	29°	8 AM	22°
Highest recording for Nov.	78°	8 PM	29°		
Lowest recording for Nov.	—8°				

Precipitation

0.10 inches precipitation in past 24 hours. Kind—Snow.
3.50 inches total to date for month.
2.95 inches average for the month of November.

Relative Humidity Today 73% Yesterday 89%

Barometric Pressure (1300 feet above sea level)

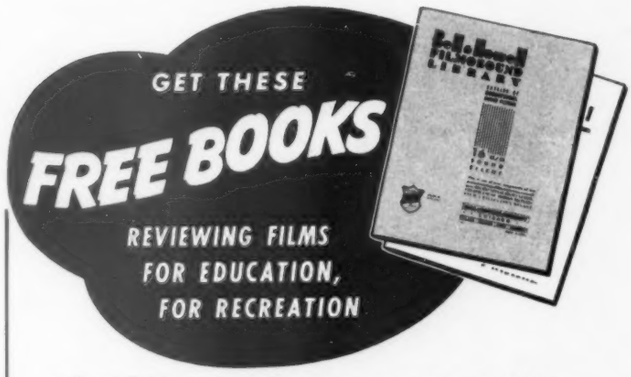
29.60s inches Today 29.22s inches Yesterday

Condition of Sky

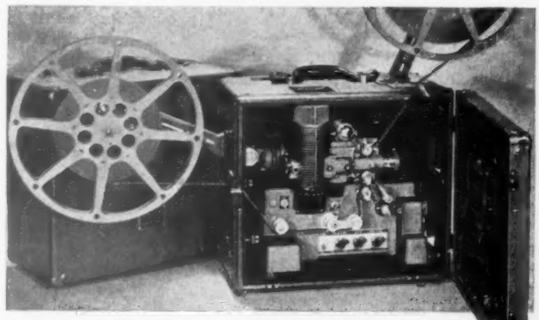
Clear Partly Cloudy *Cloudy* Kind of Clouds—Nimbus

Wind Direction West Velocity 6 mph

Weather Forecast—Snow and continued cold today—Fair and Cold tomorrow.



● Just off the press are these two new catalogues of 16 mm. sound and silent films for school use. They include hundreds of recent additions to the Bell & Howell Film Library, as well as previously catalogued films. And they are easier to use; first, because educational and recreational films are presented in separate books and, second, because educational films are now arranged by curricular divisions of subject matter. Free to school owners of 16 mm. projectors, 25c each to others. Send the coupon now.



FILMOSOUND "ACADEMY"

. . . the 16 mm. sound film projector that's tailored to meet school needs . . . that's been proved in the service of thousands of schools. It projects both sound and silent film and offers a wide range of audience-handling capacity, instant lens interchangeability, and provisions for using microphone and phonograph turntable. Exclusive Safe-lock Sprockets make incorrect film threading impossible. Complete film protection, too, is afforded by these sprockets and by the new B&H Constant-tension Take-up. Long life and lasting dependability—as important to cost as purchase price—are assured by correct design, B&H metered lubrication, and by precision construction by the engineers who for 33 years have built Hollywood's preferred professional equipment. Price, $298.

A B&H Visual Education Specialist Is Near You

B&H Visual Education Specialists, distributed as mapped, are fully informed, capable, ready to help you solve any school motion picture problem both before and after purchase. This staff is but one expression of Bell & Howell's complete service to schools, which also includes renting and selling films and supplying cameras and accessories as well as projectors.

Use coupon for specialist's service; for information.

BELL & HOWELL COMPANY
1817 Larchmont Ave., Chicago, Ill.
☐ Send Educational Film Catalogue.
☐ Send Recreational Film Catalogue.
☐ Send details on projectors for ☐ sound film; ☐ silent film.
☐ We now own.....sound / silent 16 mm. projectors of.....make bought from.....
☐ Have your nearest Visual Education Specialist call to help me with this problem:
.....
.....
Name.....
School.....
Address.....
City.....*State*.....
ES 1-41

PRECISION-MADE BY
BELL & HOWELL

Among the Producers

SVE Kodachrome Slide Catalog

The Society for Visual Education, Inc., 100 East Ohio Street, Chicago, has just issued their first catalog of 2x2 Kodachrome Slides. It is an impressive and comprehensive compilation of slides assembled expressly for classroom use. The thousands of transparencies listed in the 62 pages represent only the nucleus about which the library will be built during the coming year. A second section of this catalog is already in preparation and will appear within a few months.

The catalog has been developed primarily for use in the schoolroom, and the individual slides are listed alphabetically under the following curriculum headings: Fine Arts, Geography (Foreign and United States), History, Literature, Natural Sciences, Patriotic, Recreation and Travel, Religion, Sociology, Transportation, and Water Safety.

Despite the current world crisis, the Society has been fortunate in acquiring Kodachromes of almost every foreign country, photographed in natural color on the actual location pictured. The foreign slides feature places of interest, historic and geographic, and costumes and manners of the people.

Prices are 50c each for slides in Eastman cardboard Readymounts, or 60c each mounted in the new S.V.E. glass Slide Binder.

A separate listing of their "Library of Religious Filmstrips and Kodachromes" (Catalog 1940-41) has also been compiled by the Society, presenting material recently acquired or revised. The Picturols are classified under Religion in Art, Episcopal Sets, Peace, Temperance, Sermons, Sunday School Lessons and Bible Study, Geography of the Holy Land, Life in Biblical Times, Missionary Study, Hymns.

De Vry Movie News

The *De Vry Movie News*, published by the DeVry Corporation, 1111 Armitage Avenue, Chicago, Illinois, is now ready for distribution. Of particular interest and value to those in the Visual Education field, this well printed, newsy, pictorial publication is sent Free to those requesting same.

Music Note Pitch Teaching Device

A novel musical instrument has been designed for teaching music in the classroom. It is pleasing to the eye, compact and portable, measuring 30"x36", and at a finger touch becomes a dynamically animated object displaying the note on the chart and reproducing the correct tone desired at the same time, thus appealing to the three senses, sight, hearing and touch. It shows the student of music with his own eyes, what he may expect to hear with his ears.

The Notation shown on the chart was arranged by Milo Fields, a music teacher connected with the public school system in Wells County, Indiana. The construction of the keys and air chamber were fashioned by an accordian manufacturer, Cris Zuercher, of Berne, Indiana. The tones are produced through tongue reeds, giving them pleasing organ-like effects. The face of the chart is so designed that every detail to be taught may be plainly seen. The range is from low B-flat to A, covering the range of the average soprano voice. Chords may be demonstrated without moving a single part. The science of chord construction may be vividly impressed upon the pupil, as the tones may be prolonged or suspended indefinitely. The different scales are printed on the chart, thereby giving the

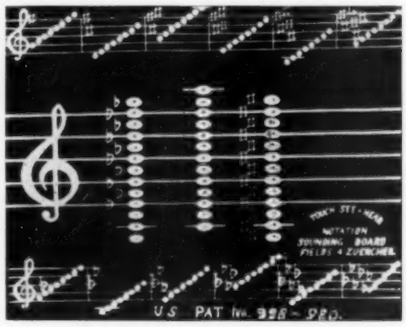


Chart devised to teach music.

key signature of any chosen scale. The correct relation of notes, sharps and flats to one another are clearly shown.

Vocational Guidance Slidefilm

A sound slidefilm, entitled "Youth in the Market Place," is a welcome addition to the limited number of visual aids available for vocational guidance work. This film, produced especially for high school and college students, pictures a young man's introduction to the seven major basic qualities essential for finding himself in the world of work, and is drawn from hundreds of actual incidents. It points out the real need of youth, and suggests a virtually untapped field for educators and others who wish to help meet that need.

Complete sound and projection equipment is shipped if desired, along with the picture, by its producer, A. Gordon Bradt, 818 Judson Avenue, Evanston, Illinois.

2x2 Slide Sets

Full double 35mm size 2"x2" slide sets —twenty mounted slides in a set—are offered by Art Slide Company for one dollar a set. Titles of some of the sets indicate the subject-matter: "Country Paths and Roads," "Flower Collection," "Trees," "Lakes and Streams," "Table-Top Antics," showing comical antics of puppets, "Assorted Views" (2 sets compiled as samples of the photographic quality of the slides), and consisting of scenic, travel and pictorial subjects. Three sets of Art Slides, ten slides to a set, furnish art studies of the female form for the use of art students and teachers.

Complete information on the slide sets, 100-watt Vokar projector, and outfit for making 2x2 slides, can be obtained from Art Slide Co., Sippo Lake, Canton, Ohio.

Motion Pictures—Not for Theatres

(*Continued from page* 17)

From the standpoint of visual education, not only may the picture plan to be too restricted, but the producer's sphere of operations may be needlessly narrow—needlessly, that is, if the producer expects to make the living profit to which he is entitled. Robert Bruce, it will be recalled, was too canny to limit even his first motion picture to the vicinity of his ranch, although his original thought had been to attract the Eastern dudes to it. Nevertheless, one finds able motion picture photographers living closely to each important tourist center, specializing in "views" of the local "sights," the postcard perquisite commonly part of the business.

This observation is possibly belied by the records of the Yellowstone Park Film Company, which was organized at Gardiner, Montana, in 1917, and Best's Studio at Yosemite National Park, in California, which has produced a long series of reels concerning that area. I don't know. Perhaps Best's had more than ordinary sightseeing interests. I am not forgetting that Arthur C. Pillsbury made some of his finest flower pictures in a secluded studio at Yosemite. So the Yellowstone concern seems a better case in point. It was headed by Howard Eaton, a well known guide to the Yellowstone country, with W. S. Berry, a photographer at Gardiner since about 1902, as secretary and manager. To be sure, there is an inexhaustible supply of photographic material in both of the wonderlands mentioned; but how are organizations which merely capitalize the landscape in its scenic aspects—fickle theatrical and non-theatrical interests being what they are—to make their specialties pay?

If they had enlarged their spheres to cover all of the national parks, or even had added a few more to make a regional group, they surely could have found a more receptive, steadier market. Results might still have been cursory, but they would have been less repetitious, too. In other words, the fiddler would have more tunes in his repertoire. For it is a fact, now iterated several times in these pages, that just a few subjects are of small value to either the producer or the field he serves, whereas a large and varied supply of even ordinary ones, justifies organization and maintenance.

(To be continued)

Also for the Visual Field —

"1000 AND ONE" FILM DIRECTORY

"1000 and ONE" The Blue Book of Non-Theatrical Films, published annually is famous in the field of visual instruction as the standard film reference source, indispensable to film users in the educational field. The new edition lists and describes over 5,000 films, classified into 155 different subject groups (including large group of entertainment subjects). A valuable feature is a complete alphabetical list of every film in the directory. Other information includes designation of whether a film is available in 16mm, or 35mm, silent or sound, number of reels and sources distributing the films, with range of prices charged.

132 pp. Paper. Price **75c.** (**25c** to E. S. subscribers)

The FILM EVALUATION SUPPLEMENTS TO "1000 and ONE"

A new, unique, outstanding service to the teaching field—authoritative film evaluations in card-index format.

The first Supplement is ready—presenting, on 50 standard-size library cards, evaluations totalized from multiple judgments of the 50 films most widely used and scored—after actual class use—by the Judging Committee of 500 Teachers under the National Film Evaluation Project. Each succeeding Supplement will carry the next 50 films to attain their quota of Score Cards from the Committee.

Price per Supplement, with full explanations accompanying, 50 cents (postpaid if cash with order.) (Sold only to owners or purchasers of "1000 and ONE Films," 16th edition).

VISUALIZING THE CURRICULUM
By C. F. Hoban, C. F. Hoban, Jr., and S. B. Zisman.

Presents in theory and in practice the basic methodology of visual instruction in relation to classroom procedure. Throughout the text the theory of visual aids is applied to textbook illustration. "Visualizing the Curriculum", itself a splendidly "visualized text", provides an abundance of technical guidance in the form of illustrative drawings of photographs, reports of school journeys, suggestions for mounting materials, for making slides, film strips, etc. It incorporates up-to-date material, provides a fine balance in the treatment of various teaching aids, evaluates various types of aids, and defines the functions and values of each in the learning process.

320 pp. Cloth. Illus. Price.**$2.75**

THE AUDIO-VISUAL HANDBOOK. (3rd Edition)
By Ellsworth C. Dent

Presents in convenient form, practical information for those interested in applying visual and audio-visual aids to instruction. The six chapters include discussions on "The Status of Visual Instruction," "Types of Visual Aids and Their Use," "Types of Audio-Visual Aids to Instruction," "Types of Sound Aids for Schools," "Organizing the Audio-Visual Service," "Source List of Materials and Equipment."

212 pp. Illus. Cloth. Price **$1.50.**

PICTURE VALUES IN EDUCATION
By Joseph J. Weber, Ph. D.

An important contribution to the literature of the visual field. Presents in unusually interesting form the results of extended investigations on the teaching values of the lantern slide and stereograph.

156 pp. Cloth. Illus. Price **$1.00**

(**67c** to E. S. subscribers)

Full Proceedings of the Midwestern Forum on Visual Aids (Held in Chicago, May 1939)

The most complete record ever printed and on one of the livest visual meetings ever held. Numerous addresses by leading figures in the visual field, a notable Directors' Round Table and ***three complete recordings of classes taught by sound films*** are among the rich contents of the 80-page booklet.

80 pages, Paper. Price **50c.**

(**25c** to subscribers of Educational Screen)

HOW TO MAKE HAND-MADE LANTERN SLIDES.
By G. E. Hamilton.

Simple directions for making this economical and increasingly popular teaching aid. 24 pp. Paper. Price **10c.**

EVALUATION OF STILL PICTURES FOR INSTRUCTIONAL USE. By Lelia Trolinger

A full presentation of the latest piece of research on determination of teaching values of pictures. Development of the Score Card and elaborate experiment in use of same. Full documentation, tabulation of results, and appendices. **The** latest, most complete and scholarly investigation of a problem in the visual teaching field that has long needed such a solution. 48 pp. Paper. Illus. Price **50c.**

THE EDUCATIONAL TALKING PICTURE
By Frederick L. Devereux.

Presenting preliminary solutions of some of the more important problems encountered in adapting the talking picture to the service of education. The first six chapters deal with the development of fundamental bases of production, with the experimentation which has been conducted, and with suggested problems for future research. The remaining chapters discuss the effective use of the sound film in teaching.

220 pp. Cloth. Illus. Price **$2.00.** (20% discount to schools)

HOW TO USE THE EDUCATIONAL SOUND FILM
By M. R. Brunstetter, Ph. D.

Discusses the utilization of the educational sound film, and lists and illustrates techniques for placing the film into effective service in the classroom. The procedures suggested are based upon extended experience in studying teachers' use of sound films and in helping to organize programs of audio visual instruction in school systems. Two valuable Appendices and a full index.

175 pp. Cloth. Illus. Price **$2.00.** (20% discount to schools)

MOTION PICTURES IN EDUCATION IN THE UNITED STATES. By Cline M. Koon.

A report of the instructional use and indirect educational influence of motion pictures in this country, divided into nine units. Treats the motion picture (1) as an educational influence; (2) in service of health and social hygiene; (3) in governmental service and patriotism; (4) in vocational guidance; (5) in international understanding; (6) Motion picture legislation; (7) technique of production and distribution; (8) systematic introduction of films in teaching; (9) general educational problems of films in teaching.

106 pp. Paper. Price **$1.00** (20% discount to schools)

THE STEREOGRAPH and LANTERN SLIDE IN EDUCATION. By G. E. Hamilton.

The most comprehensive discussion yet published.

47 pp. Paper. Price **15c.**

TO ORDER, Check Material Desired and Fill in Blank Below

	Price	To subscribers of E. S.
"1000 and One" Film Directory	$ .75 ☐	$ .25 ☐
Film Evaluation Supplement	.50 ☐	.50 ☐
Visualizing the Curriculum	2.75 ☐	2.75 ☐
The Audio-Visual Handbook	1.50 ☐	1.50 ☐
Picture Values in Education	1.00 ☐	.67 ☐
Proceedings of Mid-West Forum on Visual Aids	.50 ☐	.25 ☐
Evaluation of Still Pictures	.50 ☐	.50 ☐
The Educational Talking Picture	2.00 ☐	2.00 ☐
(To Schools	1.60 ☐	1.60 ☐
How to Use Educational Sound Film	2.00 ☐	2.00 ☐
(To Schools)	1.60 ☐	1.60 ☐
Motion Pictures in Education in The United States	1.00 ☐	1.00 ☐
(To Schools)	.80 ☐	.80 ☐
Stereograph and Lantern Slide in Education	.15 ☐	.15 ☐
How to Make Handmade Lantern Slides	.10 ☐	.10 ☐

Subscription to THE EDUCATIONAL SCREEN

U. S.	1 year, $2.00 ☐	2 years, $3.00 ☐
Foreign	1 year, $3.00 ☐	2 years, $5.00 ☐
Canada	1 year, $2.75 ☐	2 years, $4.50 ☐

Educational Screen
64 E. Lake St., Chicago

I have indicated items desired and enclose check for $.....

Name .....

School or Street.....

City..... State.....

HERE THEY ARE

A Trade Directory for the Visual Field

FILMS

Akin and Bagshaw, Inc. (3)
1425 Williams St., Denver, Colo.

Audio-Film Libraries (2)
661 Bloomfield Ave., Bloomfield, N. J.
(See advertisement on page 36)

Bailey Film Service (3, 4)
1651 Cosmo St., Hollywood. Cal.

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 41)

Castle Films (3)
R C A Bldg., New York City
(See advertisement on page 1)

College Film Center (3, 5)
59 E. Van Buren St., Chicago.

DeVry School Films (3, 4)
1111 Armitage Ave., Chicago

Dudley Visual Education Service (1)
736 S. Wabash Ave., Chicago
4th Fl., Coughlan Bldg.
Mankato, Minn.

Eastman Kodak Co. (1)
Teaching Films Division,
Rochester, N. Y.

Eastman Kodak Stores, Inc. (3)
Kodascope Libraries
356 Madison Ave., New York City

Eastman Kodak Stores, Inc. (3)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

Edited Pictures System, Inc. (3)
330 W. 42nd St., New York City

Erker Bros. Optical Co.
610 Olive St., St. Louis, Mo.

Erpi Classroom Films, Inc. (2, 5)
35-11 35th Ave., Long Island City,
N. Y.
(See advertisement on page 25)

Films, Inc. (3)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
314 S. W. Ninth Ave., Portland, Ore.

Garrison Films (3,6)
1600 Broadway, New York City
(See advertisement on page 29)

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Walter O. Gutlohn, Inc. (3)
35 W. 45th St., New York City
(See advertisement on paye 37)

Harvard Film Service (3, 6)
Biological Laboratories,
Harvard University, Cambridge, Mass.

Health Film Service (3)
First Nat'l Bank Bldg., Salem, Ore.
(See advertisement on page 36)

Hoffberg Productions, Inc. (2, 5)
1600 Broadway, New York City

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 4)

International Film Bureau (3, 5)
59 E. Van Buren St., Chicago
(See advertisement on page 36)

Lewis Film Service (3)
105 E. 1st St., Wichita, Kan.
(See advertisement on page 37)

Manse Film Library (2)
1521 Dana Ave., Cincinnati, O.
(See advertisement on page 28)

Post Pictures Corp. (3)
723 Seventh Ave., New York City
(See advertisement on page 27)

Sunray Films, Inc. (2, 5)
Film Bldg., Cleveland, O.
(See advertisement on page 28)

Theatre-on-Film, Inc. (2)
1619 Broadway, New York City.
(See advertisement on page 29)

United Educator Films Co. (2)
State Theatre Bldg., Pittsburgh, Pa.
107 South Court, Sq., Memphis, Tenn.

United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.

Universal Pictures Co., Inc. (5)
Rockefeller Center, New York City
(See advertisement on page 34)

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Vocational Guidance Films, Inc. (2)
Old Colony Bldg., Des Moines, Ia.

Wholesome Films Service, Inc. (1, 6)
48 Melrose St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

Y.M.C.A. Motion Picture Bureau (3)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago
351 Turk St., San Francisco, Cal.

MOTION PICTURE MACHINES and SUPPLIES

The Ampro Corporation (3)
2839 N. Western Ave., Chicago
(See advertisement on page 39)

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 41)

DeVry Corporation (3, 6)
1111 Armitage St., Chicago
(See advertisement on page 2)

Eastman Kodak Stores, Inc. (3)
Kodascope Libraries
356 Madison Ave., New York City

Eastman Kodak Stores, Inc. (3)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

Erker Bros. Optical Co.
610 Olive St., St. Louis, Mo.

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Hirsch & Kaye (3)
239 Grant Ave., San Francisco, Cal.

Holmes Projector Co. (3, 6)
1813 Orchard St., Chicago
(See advertisement on page 32)

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago
(See advertisement on page 4)

Jarrell-Ash Company
165 Newbury St., Boston, Mass.

RCA Manufacturing Co., Inc. (2)
Camden, N. J.
(See advertisement on page 31)

S. O. S. Cinema Supply Corp. (3, 6)
636 Eleventh Ave., New York City

United Educator Films Co. (2)
State Theatre Bldg., Pittsburgh, Pa.
107 South Court, Sq., Memphis, Tenn.

United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.

Victor Animatograph Corp. (3)
Davenport, Iowa
(See advertisement on page 27)

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

SCREENS

Da Lite Screen Co.
2717 N. Crawford Ave., Chicago
(See advertisement on page 33)

Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

Erker Bros. Optical Co.
610 Olive St., St. Louis, Mo.

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES and FILM SLIDES

Art Education, Inc.
35 W. 34th St., New York City.
(See advertisement on page 28)

Art Slide Co.
Sippo Lake, Canton, O.
(See advertisement on page 37)

Eastman Educational Slides
303 Greenleaf Ave.,
Wilmette, Ill.

Edited Pictures System, Inc.
330 W. 42nd St., New York City

Erker Bros. Optical Co.
610 Olive St., St. Louis, Mo.

Friends of the Western Mountains
Arcata, Calif. (2x2 "Kodachromes")

Ideal Pictures Corp.
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 4)

Keystone View Co.
Meadville, Pa.
(See advertisement on inside front cover)

Dr. Weston A. Price
8926 Euclid Ave., Cincinnati, O.
(See advertisement on page 36)

Radio-Mat Slide Co., Inc.
1819 Broadway, New York City
(See advertisement on page 36)

Society for Visual Education, Inc.,
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Visual Education Service
131 Clarendon St., Boston, Mass.

Visual Sciences
Suffern, New York
(See advertisement on page 28)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on inside back cover)

DeVry Corporation
1111 Armitage Ave., Chicago

Eastman Kodak Stores, Inc.
Kodascope Libraries
356 Madison Ave., New York City

Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

Erker Bros. Optical Co.
610 Olive St., St. Louis, Mo.

General Films Ltd.
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Hirsch & Kaye
239 Grant Ave., San Francisco, Cal.

Jarrell-Ash Company
165 Newbury St., Boston, Mass.

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 25)

Williams, Brown and Earl, Inc.
918 Chestnut St., Philadelphia, Pa.

REFERENCE NUMBERS

(1) indicates 16mm silent.
(2) indicates 16mm sound.
(3) indicates 16mm sound and silent.
(4) indicates 35mm silent.
(5) indicates 35mm sound.
(6) indicates 35mm sound and silent.

Continuous insertions under one heading, $1.50 per issue; additional listings under other headings, 75c each.